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SOSYAL BİLİMLER ENSTİTÜSÜ
YABANCI DİLLER EĞİTİMİ ANABİLİM DALI
İNGİLİZCE ÖĞRETMENLİĞİ BİLİM DALI**

**USING THE INTERNET AS AN ENGLISH LANGUAGE
TEACHING TOOL**

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ABSTRACT

The aim of this study is to investigate whether the internet is a useful teaching tool in terms of English language teaching in the primary schools of Turkey. For this reason, a questionnaire prepared for this study has been applied to the English language teachers of fourteen primary schools in Afyonkarahisar.

In the first chapter, general background of the study and the framework have been introduced. Also in this chapter, goal and scope of the study, the problem, method of the study and limitations of it have been explained.

In the second chapter, a literature review related to the study has been done; the methods and approaches which constitute a base for using internet technology in education have been introduced, and related studies in this field have been explained.

The third chapter is the part of methodology of the study. In this chapter, the subjects and sample chosen for this study, the questionnaire to be used and the application process have been explained.

The fourth chapter is the part in which the evaluation of the results of the questionnaire and the interpretation of them with the help of tables have been presented.

In the conclusion part (the fifth chapter), the findings of the study and the suggestions have been presented.

In the Appendices, the questionnaire prepared for the study can be found.

ÖZET

Bu çalışmanın amacı Türkiye'deki ilköğretim okullarında internetin, İngiliz Dili Eğitimi açısından ne derece yararlı bir öğretim aracı olduğunu araştırmaktır. Bunun için Afyonkarahisar'da belirlenen on dört ilköğretim okulundaki İngilizce öğretmenlerine konuyla ilgili bir anket uygulanmıştır.

Birinci bölümde çalışmanın, genel tanıtımı yapılmış ve çerçevesi çizilmiştir. Yine bu bölümde çalışmanın amaç ve kapsamı, problem, çalışma yöntemi ve çalışmanın sınırlılıkları anlatılmıştır.

İkinci bölümde çalışma konusu ile ilgili literatür taraması yapılmış, internet teknolojisinin eğitim alanında kullanımına temel oluşturan yaklaşım ve yöntemler tanıtılmış ve bu alanda yapılan diğer çalışmalar anlatılmıştır.

Üçüncü bölüm çalışmanın metodolojisinin tanıtıldığı bölümdür. Bu bölümde çalışma için seçilen örneklem, bu çalışmada kullanılacak anket ve uygulama süreci anlatılmıştır.

Dördüncü bölüm, uygulaması yapılan anketin sonuçlarının değerlendirildiği ve tablolar yardımıyla yorumlandığı bölümdür.

Sonuç bölümünde ise, çalışma sonucunda elde edilen bulgular ve öneriler sunulmuştur.

Çalışmanın eklerinde uygulanan anket yer almaktadır.

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CHAPTER I

INTRODUCTION

1.1. Overview

The major and the most important one of the changes throughout the world is the development in the field of Information and Communication Technologies (ICT) and its effects in all fields. It is accepted by everyone that new information technologies have a common usage in different fields, such as economy, health, agriculture, entertainment, culture and of course education. Within these fields, probably the most important one is the effects of ICT in education.

With the help of new information and communication technologies, the present information all over the world is growing rapidly. In order to reflect the benefits of ICT in education, new information and communication technologies should be used in teaching and learning with various aims.

1.2. Background to the Study

Since the existence of human, many big changes have been experienced in producing and spreading the information. At first, the acquired experiences were transferred among people orally. Therefore the transfer of the information was totally dependent on adjacency in terms of place and time. With the development of writing, the time became less important since the information was written on the stones and preserved for a long time by that way. But it was still difficult to reach the information. The transfer of information became easier but the problem of copying prevented people to reach the information. The development of printery had an important role in copying the information and spreading it by this way. So many more people could reach the information. Afterwards, with the development of computers, the information has become more systematic, more useable and more understandable for people. An idea about connecting more than two computers in different places in order to transfer data has been put forward as a result of the development of computers. The emergence of computer networks and development of them have made the computers accessible for people

and have made it easier for them to reach the information. All of these changes can be explained as human have been trying to adapt himself to the environment to meet his needs.

The information becoming easily shareable and distributable with the help of computer and web-based technologies, has made it possible for the individuals to know other cultures and viewpoints, and has also started to affect personal efficiencies. Besides it has influenced new learning and teaching approaches. In order to prepare people for the 21st century's information society the most important matter is using computer and web technologies in structuring learning and teaching processes. In this way it will be possible to solve the problems of classical teaching methods and to make students more active in learning process.

Web-based education has influenced educational practice, raised initiatives to widen participation, increased learner autonomy, and facilitated informal and workplace learning. In this context, learning takes place progressively by making students actively participate in instructional decisions and supporting them individually to assess their personal learning goals.

The Web has changed the way we approach learning, the teaching practices we adopt, and how the curriculum is evolving. Web-based education has grown tremendously over the past few years, creating a variety of media-enhanced approaches to formal and informal learning, including innovative uses of ambient and mobile technologies. In this vein, a number of Web features have been exploited;

- Communication mechanisms, such as e-mail, newsgroups, Web conferencing, and chat rooms have been used to assist one-to-one instruction, facilitate exchange of ideas between learners and teachers, provide instructional feedback, and communicate with experts. They have been used extensively for enhancing learners' cognitive skills and increasing the amount of time available to each learner compared to traditional class hours.
- Hypermedia allowed an increased degree of interactivity compared to standard computer-based instruction by combining hypertext with multimedia. They have been used to accommodate learners' individual differences by allowing them to explore

alternative navigation paths through educational content and linked resources according to their needs. They have been used to support a variety of educational uses, for example, information seeking, content presentation, exploration activities, and collaboration.

- Accessibility of structured and unstructured information resources, such as library catalogues, distributed databases, academic repositories, search engine results, course materials, and learning resources has widely facilitated information exchange and dissemination of educational activities and course materials to meet various educational objectives.

In general internet can be explained as a network that connects computers all over the world. According to Boldt, Gustafson and Johnson (1995), internet is a perfect tool for the students to enrich their learning habits and experiences. The first aim in using this tool is to help students to gain attitudes of being a piece of this wide network through introducing them with internet. Furthermore, they can be given opportunities to benefit from project-based learning environments within this network.

The classroom of tomorrow enables students to work as collaborative learners, navigating an environment where meaning is derived by assembling fragments of information from a wide network of information providers and media. This classroom reflects much better the Information Age economy in which we find ourselves. For example, increasing numbers of students have used web-based search tools, e-mail, real-time chat software and conferencing to work with others in remote locations on collaboratively researched and written reports. These students are developing skills that will serve them in an information-based job market that puts a premium on creative use of on-line technologies (LeBlanc, 1997).

Now, we are blessed with the emergence of the World Wide Web, commonly known as the Web, as one of the most important economic and democratic mediums of learning and teaching at a distance. As the internet is rapidly emerging, the Web has become an increasingly powerful, global, interactive and dynamic medium for sharing information (Kahn, 1997).

Recently, there has been an abundance of studies, articles newscasts and online analyses devoted to the topic of teaching with the Internet. This trend is undoubtedly part of the reason for all of the current interest in the new technologies. Collins (1991) observed that the “use of computers tend to subvert the prevailing, didactic view of education that holds sway in our society. Using computers entails active learning, and this change in practice will eventually foster a shift in society’s beliefs toward a more constructivist view of education.”

1.3. Goal and Scope of the Study

In recent years, computers and internet have been used as one of the most important communication tools by many people all over the world for various reasons. Computers have the most important role in rapid developments of science and technology. Therefore it is impossible to think education without computers. The features of computers as quick processing of information, storing and presenting it make computers as the most desired teaching tool in education. Benefiting from technological tools in education has been accepted by many and the applications of them in learning and teaching have been increased. So it can not be found strange to use computers and internet in education.

The main aim of this study is to investigate whether the internet is a useful teaching tool in terms of English language teaching in primary schools. In order to answer this question, this study focuses on primary school teachers’ customary use of computer and internet as well as their students’, beliefs and attitudes of teachers towards internet resources, how the internet is being used in English Language Teaching (ELT), the most problematic technical, economic and pedagogical issues in implementing the internet technology in English lessons, and how the internet resources should be used for ELT purposes.

Most of nowadays primary schools have computer laboratories in their buildings and necessary equipments can be found in those laboratories. The students can easily access to internet resources using computers in the laboratories. Any subject can be taught in the computer laboratories via technological devices. Students especially in primary schools should learn school subjects by doing and in an interaction with the things they are taught. The computers with an internet connection can help teachers in achieving this.

In foreign language teaching several opportunities can be given to language learners by using computers and internet. Several software and web sites can be used by the teachers to teach topics, and they can be used by the students to learn independently and to practice the things they have learned in written form or orally.

1.4. Statement of the Problem

There is always an ongoing debate about using educational technologies especially the internet in education. Many different researchers have examined the advantages and disadvantages of educational technologies and the effect of them in teaching and learning processes. With the help of this study it is aimed to determine whether the internet is a useful teaching tool in the English language courses of Turkish primary schools.

The usage of computers for educative purposes in Turkey began with the studies of teaching via computers in secondary education. In 1984, a commission consisting of university lecturers from related fields and representatives of ministry was employed. In the education year of 1985-1986, computer lessons and computer-assisted teaching would be applied in some of the secondary schools as a pilot phase, after the results of this pilot phase the system would be generalized (MEB Ortaöğ. Bilg. Eği. İht. Kom. Raporu, 1984). After the first usage of computers in education, it has become widespread all over Turkish schools.

Within this study, the practicability of internet for English language teaching purposes in primary schools will be examined.

1.5. Method of the Study

For this study, the books, researches, articles, studies and thesis which were prepared in Turkey and in other countries will be examined carefully at first. After a detailed literature review, the theoretical part of this study will be accomplished.

In order to collect data and to determine the present and potential usage of computers and internet in primary schools, a questionnaire will be prepared and it will be applied to English language teachers. In preparing the questionnaire the views and applications of many

researchers will be taken into account. All the results taken from the questionnaire within this study will be analyzed meticulously.

1.6. Limitations

This study will be carried out in the fourteen primary schools of Afyonkarahisar. The reason for selecting those fourteen primary schools is that they are situated in the different parts of city centre. They are all state schools. The questionnaire of this study will be applied to English language teachers in the education year of 2007-2008. The findings of this study are mostly based on the questionnaires which are filled by the English language teachers of fourteen primary schools in Afyonkarahisar.

CHAPTER II

LITERATURE REVIEW

2.1. Overview

In this second part of the study, firstly, theoretical background of web-based teaching will be mentioned, secondly some MA and Ph.D. studies related to this study will be examined and lastly information about technology in education will be given.

2.2. Theoretical Background

Since half a century, several learning theories have been influenced learning – teaching processes. Many researchers have been trying to find the effects of learning theories on learning and teaching or how those theories can be applied to the processes of learning and teaching. From 1950's, as one of the groups among these researchers, education technologists have been researching the applications of the theories in teaching in general, and creating a theoretical background in using the new technologies in specific.

So what the learning theories are and the reflections of educational technologies on the theories should be mentioned. Besides, it is necessary to explain which learning theories have important effects on web-based teaching.

2.2.1. Behaviouristic Approach

Experimental studies about learning have been started at the beginning of the 20th century with Pavlov in Russia, and Watson and Thorndike in US to understand how people and animals react to certain conditions in a laboratory environment (Atkinson, Smith and Bem, 1993; Erden, Akman, 1995).

Those first studies related to learning were tested by behaviourists and it is stated that learning is some kind of a connection between stimulus and behaviour (Erden, Akman, 1995).

Behaviorism is a theory of animal and human learning that only focuses on objectively observable behaviors and discounts mental activities. Behavior theorists define learning as nothing more than the acquisition of new behavior.

In behaviouristic approach, there are some important suppositions (Ülgen, 1997);

- An individual gains his/her behaviours through experiences.
- When the stimuli are changed, the behaviours of individuals also change.
- First experiences influence future ones.
- All the behaviours of people are learned. The theory of social learning is a factor also.
- The behaviours that can be observed and measured are taken into account. The mental activities of people, what they think and how they decide are not important.

According to the Behaviourists, there are three basic learning processes that cause to change behaviours; Classical (or Respondent) Conditioning, Operant Conditioning and Social Learning Theory (Cruickshank et al. 1995; Erden and Akman, 1995; Ülgen 1997).

2.2.1.1. Classical (Respondent) Conditioning

Classic conditioning occurs when a natural reflex responds to a stimulus. The most popular example is Pavlov's observation that dogs salivate when they eat or even see food. Essentially, animals and people are biologically "wired" so that a certain stimulus will produce a specific response.

In this theory, learning occurs when there is a link between stimulus and response (Cruickshank et al. 1995). With the help of this link, learners can gain desired behaviours. It is based on the idea that every learner can learn when necessary time and opportunity to practice is provided (Atkinson et al., 1993; Ülgen, 1997)

2.2.1.2. Operant Conditioning

Operant conditioning occurs when a response to a stimulus is reinforced. Basically, operant conditioning is a simple feedback system: If a reward or reinforcement follows the response to a stimulus, then the response becomes more probable in the future. For example,

leading behaviorist B.F. Skinner used reinforcement techniques to teach pigeons to dance and bowl a ball in a mini-alley.

According to this theory, learning can be formed when the reinforcements are used systematically. If the learner performs the related behaviours properly and in the correct order, a reward will be given (Cruickshank et al. 1995).

In Operant Conditioning, the desired behaviour should occur before learning. When the response is observed, reinforcement can be given. Therefore, the learners have to do the activity in the learning environment to get the reinforcement. The activity of the learner is a kind of reinforcement source, and if it is followed by a reward, the frequency of response will increase. That is, learning becomes permanent (Akpınar, 1999; Feldman, 1993).

As the basics of Operant Conditioning, reinforcements are of two types. One is positive reinforcement and the other is negative. Positive reinforcement occurs when a behavior is followed by a favorable stimulus (commonly seen as pleasant) that increases the frequency of that behavior. But negative reinforcement occurs when a behavior is followed by the removal of a disgusting stimulus (commonly seen as unpleasant) thereby increasing that behavior's frequency.

In learning through Operant Conditioning, the time and frequency of reinforcements are important factors that affect the process. When and how frequently the reinforcements are used depends on the students' profiles (Erden and Akman, 1995). So, there are mainly two different reinforcement types, as permanent reinforcement and at intervals reinforcement.

2.2.1.3. Social Learning Theory

The theorists of this learning theory are N.E. Miller, J. Dollard and A. Bandura. According to Miler and Dollard, all children observe the people's behaviours around them and the results of their behaviours. The reinforced ones are imitated, whereas the ones resulted as negative for them are not (Cruickshank et al. 1995; Erden and Akman, 1995).

According to Bandura, learning is not as simple as to imitate a reinforced behaviour. Observation also has a function of informing people. According to Bandura, if the behaviour

is stored and changed in a way, it should also be coded in the memory and remembered if necessary. In this respect, social learning theory has a cognitive dimension (Cruickshank et al. 1995; Erden and Akman, 1995).

There have been many criticisms of behaviorism, including the following:

1. Behaviorism does not account for all kinds of learning, since it disregards the activities of the mind.
2. Behaviorism does not explain some learning--such as the recognition of new language patterns by young children--for which there is no reinforcement mechanism.
3. Reserach has shown that animals adapt their reinforced patterns to new information. For instance, a rat can shift its behavior to respond to changes in the layout of a maze it had previously mastered through reinforcements.

This theory is relatively simple to understand because it relies only on observable behavior and describes several universal laws of behavior. Its positive and negative reinforcement techniques can be very effective, both in animals, and in treatments for human disorders such as autism and antisocial behavior. Behaviorism often is used by teachers, who reward or punish student behaviors.

2.2.2. Cognitive Approach

In this theory, learning is what the learners know and how they reach the knowledge. The focus is not on the outer factors as in the Behaviourism, but on the inner factors such as cognitive processes (Deryakulu, 1995). Studies about cognitive processes beginning with Gestalt psychologists have been developed by others such as Piaget, Bruner and Ausubel and called as Cognitive Theories (Erden & Akman, 1995).

According to this theory, when people face with a problem, they learn by interacting with the unique dynamics of that problem. So, learning can be defined as three basic processes; foreknowledge gaining new associations, storing knowledge about the problem, and defining appropriate alternatives for solution. In other words, it is related with cognitive

processes and patterns. So, in terms of Cognitive approach, learning depends on organisms' reaching the new experiences and knowledge (Aydın, 2001; Feldman, 1993).

This theory has two basic sub-theories as data processing theory and meaningful theory (Cruickshank et al. 1995).

2.2.2.1. Data Processing Theory

In data processing theory, attention, short-term memory and long-term memory are examined; and in terms of these processes, some important concepts such as storing, interpretation, integrating the old information with the new ones, remembering when necessary are highlighted (Ülgen, 1997; Wartman, Loftus & Marshall, 1998).

2.2.2.2. Meaningful Learning

Some cognitive approach theorists have dealt with data processing theory, whereas some others have dealt with how the knowledge can be meaningful and which sequence should be followed for better understanding. Meaningful learning theory has three subdivisions; reception learning, discovery learning and problem solving (Cruickshank et al. 1995).

2.2.3. Constructivist Approach

Constructivism has begun with the studies of Bruner, Piaget and Vygotsky. Constructivism states that learning is an active, contextualized process of constructing knowledge rather than acquiring it. Knowledge is constructed based on personal experiences and hypotheses of the environment. Learners continuously test these hypotheses through social negotiation. Each individual has a different interpretation and construction of knowledge process. The learner is not a blank slate (*tabula rasa*) but brings past experiences and cultural factors to a situation.

Nowadays, the majority of Web-based educational systems rely on learning environments and training programmes that support or supplement teaching and learning. They have influenced practical Web-based education, and when used within a constructivist

framework of learning, they can actively engage the learner in the interpretation of the content and the reflection on their interpretations. Nevertheless, the complexity of the learning experience poses a number of theoretical, methodological, and practical challenges with regards to accommodating learner's individual needs and maximising the effectiveness of Web based education.

This theory can be examined under two parts as cognitive constructivism and social constructivism.

Constructivist approach has been developed with the studies of Swedish developmental psychologist, Jean Piaget. Piaget's theory consists of 'age' and 'phase' elements. Age and Phase are used to predict what children understand at different ages, and as a developmental theory, they also explain how cognitive abilities of children improve. People construct their knowledge through experiences. Experiences give them the opportunity to create 'schema' and 'cognitive samples' in their minds. Those schemas can be changed and developed in specific situations.

The most famous cognitive constructivist using computers in education is Papert (1993). Constructivism has not found a common usage in education given with the help of technology in the classrooms yet. But the findings and applications of this theory are good for the future. Especially, some of recently produced software, videodisk and CD-Rom applications are important samples of cognitive constructivism learning theory. Thanks to these software, learners can have a chance to construct knowledge in terms of their own experiences.

Social constructivism has been developed with the studies of Vygotsky. In the field of education technology, many applications based on social constructivism theory are increasing rapidly. Especially, using information networks in learning – teaching processes is an accelerating factor in improving this theory. Social Constructivism Theory emphasizes the importance of culture and social content in cognitive development. The most known concept of this theory is Vygotsky's zone of proximal development. In addition to this, four principles in the application of social constructivism theory should be considered;

- Learning and development is a social, cooperative activity.

- The zone of proximal development serves as a guide for creating a curriculum and planning lessons.
- Learning in classrooms should occur in a meaningful context, and real life shouldn't be thought as a separate part of it.
- The experiences gained outside classrooms should be related to inner ones.

Some features are needed for a constructivist view in classrooms;

- The content should be constructed with the knowledge of the learners.
- The content includes the involvement of more than one sense organ.
- A certain problem is provided for the learners to solve. Learning should take place in real contents.
- The development of problem solving ability changes from person to person during the process.
- Learning occurs through exploring, experiences, and modeling.
- Problems are solved naturally.
- Learners should consider the steps by themselves and be really motivated.
- Learners should be encouraged to communicate with each other.
- Instructor should be an active leader and has a facilitative role.
- Instructor should support the learners to create a functional schema and theoretical structure of the case.
- Evaluation forms are parts of learning process.
- The failure of the learners reveals that they need help.

The ultimate goal of a constructivist approach is to allow learners to construct, transform, and extend their knowledge. Thus, learners take the responsibility of their learning by interacting with educational material that covers different knowledge levels and various learning objectives. However, learners have heterogeneous backgrounds and differ in traits such as skills, aptitudes, and preferences for processing information, constructing meaning from information, and applying it to real-world situations.

Personalisation technologies are defined as approaches to adapt educational content, presentation, navigation support, and educational services so that they match the unique and specific needs, characteristics, and preferences of each learner or a community of learners. Personalisation helps build a meaningful one-to-one relationship between the learner/teacher

and the learning environment by understanding the needs of each individual and helps to reach a goal that efficiently and knowledgeably addresses each individual's need in a given context (Riecken, 2000).

Personalisation is usually applied by three different means: content level adaptation, presentation level adaptation, and navigation level adaptation. For example, content level adaptation in an educational system may be implemented by dynamically generating a lesson or assembling it from various pieces of educational material depending on the knowledge level of the learner. Thus, advanced learners may receive more detailed and in-depth information, while novices will be provided with additional explanations. Presentation level adaptation is typically implemented through a variety of techniques, such as adaptive text and adaptive layout. Adaptive text implies that the same Web page is assembled from different texts accommodating the learner's current need, such as removing some information from a piece of text or inserting extra information. Adaptive layout aims to differentiate levels of the subject content by changing the layout of the page, instead of the text, such as font type and size and background colour. Lastly, navigation level adaptation includes various techniques, such as direct guidance, adaptive ordering, link hiding, and link annotation.

Personalisation in a Web-based learning environment builds on a reasoning process or adaptation rational that is responsible for synthesising adaptive techniques and making decisions about the kind of adaptation needed to accommodate the needs of the current user in the given context. Obviously, this process of generating a hypermedia space that is dynamically adapted to the current needs of different learners requires understanding the individual. Understanding the learner in a typical classroom setting is achieved by observing what learners would say and do, their errors, and responses to tutors' queries. In personalized learning environments, learner modeling is the fundamental mechanism to personalise the interaction between the system and the learner. Learner model generation involves interpreting the information gathered during interaction in order to generate hypotheses about learner goals, plans, preferences, attitudes, knowledge, or beliefs. The generated learner models are stored in a database and used to identify current user needs, decide on the types of adaptation to be performed, and communicate them to a personalized interface.

There are several guiding principles of constructivism:

1. Learning is a search for meaning. Therefore, learning must start with the issues around which students are actively trying to construct meaning.
2. Meaning requires understanding wholes as well as parts. And parts must be understood in the context of wholes. Therefore, the learning process focuses on primary concepts, not isolated facts.
3. In order to teach well, we must understand the mental models that students use to perceive the world and the assumptions they make to support those models.
4. The purpose of learning is for an individual to construct his or her own meaning, not just memorize the "right" answers and regurgitate someone else's meaning. Since education is inherently interdisciplinary, the only valuable way to measure learning is to make the assessment part of the learning process, ensuring it provides students with information on the quality of their learning.

Constructivism calls for the elimination of a standardized curriculum. Instead, it promotes using curricula customized to the students' prior knowledge. Also, it emphasizes hands-on problem solving.

Under the theory of constructivism, educators focus on making connections between facts and fostering new understanding in students. Instructors tailor their teaching strategies to student responses and encourage students to analyze, interpret, and predict information. Teachers also rely heavily on open-ended questions and promote extensive dialogue among students.

Constructivism calls for the elimination of grades and standardized testing. Instead, assessment becomes part of the learning process so that students play a larger role in judging their own progress.

2.2.4. Humanistic Approach

Another approach related to learning – teaching processes is Humanistic Approach. This theory claims that learners should think positively about themselves and be accepted by the others. In order to achieve these, primarily, each of them should be seen as unique and having different emotions and thoughts. That means, they are what they are, and even it is enough to accept them. They are valuable and also talented (Cruickshank et al., 1995).

Humanistic Approach can be thought as the development of the learner's self-concept. If the learner feels good about him/herself, then that is a positive start. Feeling good about oneself involves an understanding of ones' strengths and weaknesses, and a belief in one's ability to improve. Learning is the means to progress towards the top of self-development, which Maslow terms 'self-actualization'.

2.2.5. Basics of Education Technology

In this part, the important equipments (theories, ideas, products, results, etc.) that effect the time they emerged and direct the applications of education technology will be examined. The common point in these equipments is that the latter ones benefit from the outputs of the formers and make the previous ones old technology. The emergence of these technologies, brief information about them, and the theory/ies which they are based on will be explained below.

2.2.5.1. Programmed Learning

In traditional education, the psychologists and educationalists who state that since learners are trained in groups, the difference among their own pace and abilities can not be considered and that it is wrong, have put into practice some experimental studies. That means, these researchers find the traditional way of learning in groups as deficient, and therefore, new ways, such as learning individually at own pace, should be searched. Since 1950's, programmed learning has taken place as a technique in learning – teaching processes (Alkan, 1997).

According to Skinner, the purpose of programmed learning is to "manage human learning under controlled conditions". It involves self-administered and self-paced learning and, in this technique, the students are presented with information in small steps called "frames". Each frame contains a small segment of the information to be learned, and a statement in which the student must fill a blank part, and after each frame the student pick out the correct answer before advancing to the next frame. It is a kind of teaching technique in which learners can control their own learning process (Heinich et al., 1996).

In programmed learning, it is important for the teachers to know their learners' profiles and their learning styles in order not to intervene the process, since they should learn on their own (Alkan and Teker, 1992).

This technique is come up with the reinforcement principles of the famous psychologist, B.F. Skinner. The basics of these principles are as follows (Alkan and Teker, 1992; Büyükkaragöz, 1996; Demirel, 1994) ;

- Small steps
- Active participation
- Immediate feedback
- Learning at own pace
- Correct answers
- Developing step-by-step

Programmed learning can be divided into two main groups as Linear Model and Branched Model.

Linear model allows learners to advance through the learning process in a particular order as they provide correct answers. Learners are provided with specific pieces of information in a series of frames and asked to recall or apply this information during frequent tests of comprehension. In linear model, all learners complete the same sequence of frames. They can move to the next frame, just in the circumstance that a student provides a correct response. Linear model makes no accommodation for errors by the learner since it is assumed that a learner will provide correct responses for nearly every question (Crowder, 1964).

Branched model was developed by Crowder, and it is also called as Crowder model. Branched model offers learners a variety of paths through a curriculum. If a learner misses a multiple choice question, s/he could be directed to previous frame or to whatever information is most appropriate based on his/her response to that question.

The most important thing in the application of both linear and branched models in learning – teaching processes is that they both provide immediate feedback to learners dependent upon their responses. Another important thing is that, according to Leshin, et al.

(1992), programmed learning is most effective when applied using the branching and interactive capabilities of computers.

2.2.5.2. Computer-Assisted Teaching

Computer-assisted teaching was put forward as a concept in 1960's, and in 1970's some studies were started in the universities of US about it (Demirel, 1994).

Computer-assisted teaching can be defined as using computers as an instrument to help learning – teaching process of a certain subject (mathematics, physics, chemistry, foreign language, etc.). It helps both teachers and learners in the process. In other words, computer-assisted teaching means using computers in order to make the students learn more effectively (Demirel, Seferoğlu & Yağcı, 2001).

Because computer-assisted teaching is based on programmed instruction, its principles are also valid for computer-assisted teaching (Keser, 1988).

Various classifications have been made about the actualization of computer-assisted teaching in classrooms. For instance, by analyzing different resources, Keser (1988) classified it as; presentation, exercising and application, simulation, dialogue, problem solving, instructional games, data bank, creative activities, and testing.

Computer-assisted teaching represents a presentation of software prepared for the specific aims of a certain lesson. Especially in the software of exercising and application, it can be observed that three factors of operant conditioning (stimulus-response-reinforcement) are very dominant (Cruickshank et al., 1995).

Since computer-assisted teaching takes its roots from the programmed instruction, the software designed for lessons and downloaded in the memory of computers, generally, are arranged according to the methods of linear programming or branched programming, and to the principles of programmed instruction (Keser, 1988).

Skinner's contribution to computer-assisted teaching occurred in 1950's by applying the experimental results in linear teaching programs. Teaching with linear model, according to

Skinner, is a process of organizing reinforcements to be permanent. The most important contribution of linear model for computer-assisted teaching is its great emphasis on the feedback concept and its insistence on the individualization of learning activity (Akpınar, 1999).

Branched model of programmed learning is different from linear one in terms of the amount of information provided, because the unit of the former can be bigger than the latter. Firstly, the learning materials are presented on the computer screens, then the learners are asked some questions (generally multiple choice ones). When the learner gives correct answer for the question, another screen with some other information appears. If a wrong answer is given for that question, the learner will be directed to the related information or screen again in terms of the characteristics of the answer, or directed to the data that will help him/her to correct the mistake. In this way, the learners can find the reason or the source of the error. This technique was developed by Crowder (1959) in US Air Force and it was based on the idea that, if guided, individuals could learn something from their errors. Branched programs are the first versions of nowadays' computer tutorials.

Other features that make branched model different from linear one are as follows;

- It gives feedback about the behaviour not only after a correct answer, but also after a wrong one.
- Linear programs avoid errors or wrong answers, and prefer small steps in order to decrease the possibility of making mistakes, whereas branched programs take the learners' mistakes as a starting point and try to find the ways of correcting them on new screens.
- On the contrary to the small steps principle of Skinner, branched programs generally present the learning material as a whole. Thus, it is claimed that learners are able to see the parts of the whole knowledge more meaningful and relational.

According to another point of view, in behaviouristic approach, need analysis, determining behavioural aims, presenting the content, performance assessment and observing the feedback (reinforcement) cycle (Cooper, 1993) are considered as the effects of behaviouristic approach's principles on the applications of computer-assisted teaching (Deryakulu, 1995).

It is also stated that computer-assisted teaching benefits from cognitive approach, such as programmed learning, since learners are directed to creative studies and problem solving activities in cognitive methods (Cruickshank et al., 1995). Besides, in designing software for computer-assisted teaching, some principles about perception, attention and sharing knowledge, developed by cognitive theorists are also adapted (Erden and Akman, 1995).

2.2.5.3. Web-Assisted Teaching

Web-assisted teaching takes its roots from programmed instruction and computer-assisted teaching. The development of web-assisted teaching has begun in 1990's with the appearance of internet, which came out from information networks, and with its worldwide usage.

Recent approaches to Web-assisted education try to take into account various dimensions of individual differences, such as level of knowledge, gender, culture, cognitive styles, learning styles, and accessibility issues for the disabled and elderly, to create learner models.

In many resources, the terms 'web-assisted teaching' and 'web-based teaching' are used in the same meaning. If their applications are examined, it is understood that web-based teaching can be applied separately, without a teacher, whereas web-assisted teaching is used as a facilitative tool for the teacher in teaching a certain subject. That means the management of web-assisted teaching depends on the teacher. Web-assisted teaching is also likened to computer-assisted teaching in a way. But the functions of web-assisted teaching are more different and various than computer-assisted one. Web-assisted teaching contains all the features of computer-assisted teaching, and in addition to this, it can offer international services. The important thing is directing the learners to the resources of information and the needs for them.

In this sense, web-assisted teaching can be defined as an environment, in which learning level of students about a lesson or a subject can be increased when the other methods and techniques are inadequate, to support learning – teaching process, and which provide synchronous or asynchronous learning in sharing information using the hardware and software functions of computer technology and information networks.

In order to apply web-assisted teaching, it is necessary to have a computer or more than one having internet connection and websites or web-pages prepared before or selected by the teacher before the lesson.

Using the features of web, web-assisted teaching is a new approach in transmitting educational information and activities. However, web does not have the power of improving students' learning on its own (Kurubacak, 1999).

Day by day, web-assisted teaching environments are becoming a virtual learning area in which students can communicate with the whole world (Kurubacak, 1999).

In the applications of web-assisted teaching, the learners can discuss and share opinions about any subject with the experts in related fields, with teachers and other learners living in other countries, and even with famous people, and they can also cooperate with them in any project about their lessons. They can achieve these by using e-mail, chat rooms, forums, and games.

Web-assisted teaching is based on some learning theories. They can change from the applications to the others. For instance, it makes use of operant conditioning theory of behaviourism, when it is used for practicing. Such as in the programmed instruction and computer-assisted teaching, in the activities of web-assisted teaching, the learner is asked a question, if they answer correctly, there appears a message like 'Congratulations! You can move on to the next question'. But if the answer is wrong, the message will be like that 'Your answer is wrong. Please try again'. The learner tries to answer the same question and the process can start from the beginning of related part.

This kind of an application is totally carried out by stimuli-response-reinforcement model of operant conditioning. Besides, positive and negative reinforcements can be observed in this process.

In the application of web-assisted teaching, students may have a chance to play games at the end of a lesson or after an exercise, and this shows that web-assisted teaching benefits from Vygotsky's social constructivism. The students can play the games on their own or together with others. The important thing is that the teacher should choose the appropriate

games about the subject of the lessons. Many web sites on the internet provide various online games according to the needs and interests of the users.

Constructivist theory claims that learners construct the information after their experiences. A way of learning by experience is games and simulations. Games help learners to compete with each other. Games are enjoyable, and at the same time they involve cooperation and group interaction. In recent years games and simulations used for educational purposes have increased, and this reveals that social constructivism is used in many of the teaching methods.

Discussing a topic in chat rooms also shows that in the application of web-assisted teaching, social learning theory of constructivist approach is being used. In such kind of chat rooms, the learners can have the opportunity to discuss the solution of any subject or to share knowledge in written form. If compared to the traditional way of discussing in classrooms, using chat rooms for discussions are more effective. All learners actively involve in the discussions of chat rooms, and they write their own ideas in those virtual environments. This manner can be explained as an environment in which the members of the group can discuss a topic and share knowledge about it in cooperation with each other, and gain new information at the end of the process by criticizing in their minds (Maddux, Johnson & Willis, 1997).

Leaving messages on the bulletin boards and giving responses to those messages are, in a way, indicators that show social constructivism are being used. In the teaching techniques of social constructivism, technology is a crucial factor to apply this approach in the lessons successfully. Some examples of applying social constructivism theory in teaching – learning processes about information technologies are as follows;

- Telecommunication tools such as e-mail, chat, bulletin boards are good ways of creating dialogues, discussions and interactive meetings. Thus, by using these kinds of communication tools, meaningful social structuring of information can be achieved.
- Software programs in information networks constitute a platform suitable for cooperative writing activities or exercises.
- Simulations make some real life situations meaningful as running of a nuclear station.

If designed and applied properly, web-assisted teaching can support the development of constructive theories with various environments. Some of these environments are as follows;

- Information networks; Hypertext, Hypermedia, reusable learning objects, WebQuests,
- Simulations,
- Microworlds,
- Online games,
- Virtual environments,
- Web-based communication,
- Application software adapted to web.

Consequently, web-assisted teaching, if used for practicing, benefits from behavioural approach; if used as information transmitter in problem solving and discovery learning, benefits from cognitive approach; and if it is used to communicate, to make projects and to discuss, benefits from constructivist approach.

2.3. Related Studies

In this part, some MA and Ph.D. studies about using materials in foreign language teaching, computer assisted language teaching, using internet in learning – teaching and web-assisted foreign language teaching will be examined.

2.3.1. Studies About Using Materials In Foreign Language Teaching

As a doctorate study, Yaşar (1990) compared programmed learning and traditional learning techniques, and searched which of them is more effective than the other. In this study, the effects of programmed learning and traditional learning on students' success, vocabulary teaching in foreign language, grammar knowledge, and success in foreign language were examined.

With the help of the results obtained at the end of the study, it was inferred that;

- 1- In the process of teaching vocabularies in a foreign language, the programmed teaching method is more effective than the traditional teaching method.
- 2- In acquiring the grammar skills of a foreign language, there is not a meaningful relation between programmed teaching and traditional method in terms of students' success.
- 3- In generating success in a foreign language, there is not a meaningful relation between programmed teaching and traditional method in terms of students' success.

In another study prepared by Ergin (1991), the opinions of foreign language teachers working in Secondary Schools, about in-service training related to education materials, and their attitudes towards education materials were examined.

It was found that the majority of foreign language teachers did not benefit from education materials, and as a reason not to use education materials, the teachers claimed that they did not have the suitable materials to use in the lessons in their schools. In-service training programs meant a lot for most of the foreign language teachers, so they were eager to participate in an in-service training program about how to benefit from education materials.

2.3.2. Studies About Computer-Assisted Language Teaching

In a doctorate study prepared by Odabaşı (1994), the effect of computer-assisted learning method on students' success in terms of learning grammar in foreign language was researched.

In the application phase of the study which was carried out in experimental model, it was benefited from four different sources as software, course book, teacher and computer expert. The grammar structure applied within this study, Passive forms, was taught with the help of computer software in the experiment group, and it was taught by the teacher using traditional method in the control group.

With the statistical analysis done for this study, it was concluded that;

- There is not a meaningful relation among the success of students in the experiment and control groups.
- There is not a meaningful relation between computer-assisted foreign language learning and traditional learning method in terms of permanence.

In another study prepared by Öztürk (1995), the evaluation of software in computer-assisted language teaching was examined. Within this study, a software evaluation form was created to generate a standard in computer-assisted language teaching. The form prepared for the study was said to be used by the designers in the process of software development, or the form could be used to choose the one among many others created before to specify which one is qualified enough and which one meets the needs.

Alkan (1997) made a comparison between two different high school models as computer-assisted English language teaching and teacher-centered English language teaching. This study lasted a whole year, and at the end of the study it was found that computer-assisted teaching helps improving the quality of teaching and also makes learners more active, successful, productive and creative.

In another study prepared by Şentürk (1997), the effect of computer-assisted courses on listening comprehension skill was researched. In the study carried out with experimental model, an extra 20-hour computer-assisted course was given to experiment group, and control group was also given an extra 20-hour course in traditional way.

At the end of the study, it was found that there is not a meaningful relation between the two groups. Yet just for the TOEFL part, control group had a meaningful improvement. As a conclusion, computer-assisted listening comprehension courses did not cause a clear improvement compared to traditional listening comprehension ones, but it was observed that computers facilitate learning process and make learning easier for the learners.

In the study prepared by Tuzcuoğlu (2000), the attitudes of ELT Department lecturers towards using computer-assisted language learning in foreign language teaching was examined. A form prepared for collecting data was applied to 33 lecturers. After the study, it was found that ELT Department lecturers have positive attitudes towards using computer-assisted language learning in their courses. Besides, it was also reported that computer-

assisted teaching attracts the students' attention and it facilitates the foreign language learning skills of students.

2.3.3. Studies About Using Internet in Learning and Teaching

In the study prepared by Yavuz (1998), the contributions of internet to the online postgraduate programs of English language teaching were researched. The data of this study was gathered through questionnaire and oral interview. At the end of the study it was suggested that a distance learning program can be used in ELT.

In another study prepared by Smith (1998), the potential of communication tools in terms of giving feedback in improving a private lesson was examined. As communication environment, chat rooms, e-mail and video conferencing were used. Within this study, no indication which shows that communication via computers improve the process of private lessons could be found. But it was found that chat rooms are more effective than the other communication tools in cooperative studies.

In a study prepared by Vural (1999), determining the efficacy of individual learning and group learning in teaching the internet was examined. At the end of this study, it was found that statistically there is not a relation between individual learning and group learning methods in terms of success and attitude. Some of the suggestions offered within the study are as follows;

- In order to use the internet effectively in learning and teaching the groundwork should be established, hardware and software should be developed, the contents should be translated to Turkish and the teachers should learn English.
- To benefit from internet in learning and teaching and to use it effectively sample lessons and projects should be developed.
- In teaching the internet the effects of other methods, except from individual learning and group learning, in terms of success can be examined.

In another study prepared by Cebeci (2000), web-based instruction within technological education strategies of businesses was examined. The study was carried out by using literature review method. The conclusions drawn at the end of the study are as follows;

- The developments and studies in this field, using technology in education and the applications of web-based instruction all point out positive signals.
- Very soon the applications of web-based instruction will become an indispensable education strategy using with traditional methods, especially in banking.

2.3.4. Studies About Web-assisted Foreign Language Teaching

In this part some of the studies about web-assisted foreign language teaching will be mentioned.

In a study prepared by Frizler (1995), using the internet to improve the writing skill in English language learning was researched. Within this study, the university students learning English language wrote their compositions on the internet. At the end of the study, it was claimed that it is very useful to use internet in improving the writing skills of English language learners, it gives confidence to them and improves the writing skills of the students.

In another study prepared by Gürkaya (1999), the effect of the internet and electronic mail on the learning process of English language learners in preparatory class was examined and it was aimed to determine if it is beneficial to integrate the activities of internet with the writing syllabus in terms of students' language use, content and arrangement. Within the study, several writing activities based on internet and e-mail were given to nine students as homework. To understand the reactions of the students to each of those activities, they wrote their feelings and thoughts on diaries. Three writing activities written by each student were evaluated by two independent arbiters in terms of students' language use, arrangement and content. That evaluation shows that the students develop themselves in writing skills, and at the end of the year they got high marks in their final exams.

In another study prepared by Cele (1999), the present and potential uses of internet resources in Turkish universities for ELT purposes such as web, e-mail and listservs were researched. At the end of the study, it was found that most of the administrators and teachers had computers and that they had web access in their universities, but they didn't use computer technologies too much in their English classes. Although they thought that using internet resources in teaching English language was beneficial, the reason why they didn't use them in English lessons was that the number of computers was inadequate and that the teachers

needed sufficient knowledge about using computers and internet resources in learning-teaching process.

In another study prepared by Donat (2000), the reactions of preparatory class students in METU towards internet, e-mail and the software designed for improving writing skills and the effects of these applications on students' success in writing activities were examined.

The study was carried out at Middle East Technical University English Language Teaching Department with 18 preparatory class students in 1999. The data collecting methods were questionnaires, interviews, students' first and last compositions, evaluation of them by three jury members and the marks they got from those compositions after the evaluation. The students were thought the necessary information about internet, e-mail and the software for two weeks. They were given a project which they could accomplish using the internet and the software. At the end of spring term the projects were finished.

The projects written by the students were evaluated by the jury and it was found that the students improved in terms of creative ideas, text order, spelling and punctuation in writing. And the marks they got from the first and last compositions were remarkably different. It was also understood from the interviews made with the students that they had positive feelings and thoughts about using internet and computer technologies in writing.

Consequently, the studies about foreign language teaching are focusing on using different technologies in foreign language teaching processes when analyzed in chronological order. The first studies about using technologies in foreign language teaching processes were related to overhead projector and the materials in programmed learning which can now be defined as old technologies. Afterwards, with computers becoming widespread in learning and teaching, the studies focus on computer assisted language teaching.

The invention and development of internet and using it in education naturally draw attention of the researchers on this field. Many studies about using internet technologies in education have been prepared in master and doctorate level all over the world including Turkey. Besides it can be stated that not too many studies have been prepared about using internet and web in foreign language teaching and most of the studies are in master level.

They just focus on a specific topic of internet and web-assisted teaching, and examine it. Therefore many more studies should be done about web-assisted language teaching.

2.4. Technology in Education

It is clear that the developments in the field of science and technologies has changed the society in many ways, and the web-assisted information societies in the 21st century can be seen as a result of them. In this respect the competency and qualifications of individuals have been changed since they are some kind of building stones of a changing society. Nowadays all individuals are expected to collect information, interpret about it, create new ones and present that information. This process naturally affects education in many ways and redounds the importance of teaching via technology.

Education technologies are really important for learning and teaching processes. They can improve the quality of the education, reduce the time spent for achieving the aims, redound the effectiveness of the teacher, decrease the cost without influencing the quality of education and make students more active.

Using internet in education also has many advantages such as increasing the number of options, providing a rich experience environment, opportunity to learn independently and at own pace, getting the information from the first source, solving the problem of inequality of opportunity and developing creative and innovative sides of the learners. They facilitate learning because reaching present information, recreating it, gathering information, storing, processing and transforming into another form, spreading and preserving the information can easily be done.

Emerging and existing technology has always played an important part in improving the quality of education. However, what the technology is should be defined clearly. According to Dowling and Harland (2001), for the past 50 years the definition of technology has changed as the society was exposed to newer technologies. Jones (1999) pointed out that Instructional Technology taught “the how” and Educational Technology taught “the why”. Dowling and Harland (2001) described Educational Technology as the “process of analyzing learning tasks and the products that come from them.”

Blackboards, pencils, radios, movie projectors, video players, overhead projectors and computers have been widely used for a long time. Over the years, the invention of new technologies offered new pathways for educators to reach their learners. In 1913, Thomas Edison predicted that the motion picture would revolutionize the schooling system by replacing books within 10 years (Low, 2003; Noam 1998). Some years later, the invention of the radio emerged as another development for innovative educators. In 1932, Benjamin Darrow, founder and first director of the Ohio School of the Air, was quoted as having said that “the central and dominant aim of education by radio is to bring the world to the classroom, to make universally available the services of the finest teachers, the inspiration of the greatest leaders... and unfolding world events which through the radio may come as a vibrant and challenging textbook of the air.” (<http://www.ohiohistorycentral.org/entry.php?rec=1536>).

Television followed the radio and as the technology developed rapidly within the classrooms, educational psychologists also felt optimistic that such innovations would deliver accelerated outcomes among learners. In early 1960, the psychologist Skinner (as cited in Oppenheimer, 1997) believed that with the aid of teaching machines and programmed instruction, students could learn twice as much in the same time and with the same effort as they could in a standard classroom.

The personal computer revolution that begun more than two decades ago introduced yet another variable in the teaching and learning process. In 1984, Seymour Papert a pioneer in computer-based learning stated that “there won’t be schools in the future.... I think the computer will blow up the school. That is, the school defined as something where there are classes, teachers running exams, people structured in groups by age, following a curriculum – all of that. The whole system is based on a set of structural concepts that are incompatible with the presence of the computer... But this will happen only in communities of children who have access to computers on a sufficient scale.” (Papert, 1984).

In the past century, each new technology, starting with the motion picture, offered new hope to educators especially in countries where such technologies were readily available and affordable. In less than a decade, the internet has emerged as a significant variable in the teaching and learning process. While many have taken an optimistic view of technology, others have taken another attitude. Numerous researchers (e.g., Mitra & Steffensmeier, 2000)

have questioned the pedagogical usefulness of computers in teaching. Some have shed considerable doubt on the effectiveness of computers. Roblyer (1999) referred to the delivery truck debate initiated by Richard Clark who said that computer-based instruction was merely like a vehicle that delivered instruction but did not influence student achievement any more than a truck delivering groceries causes changes in nutrition. What mattered to student learning was the way the content was being delivered rather than the method of delivery. Many view computers as learning tools that should only be used if it had the potential to generate measurable improvements in student achievement (Weaver, 2000). Michael Schrage (as cited in Dierker, 1995) of the Los Angeles Times believed that computers were irrelevant to the quality of education. He even went on to suggest that a school board would deserve to be impeached or voted out if it imported computer technology without insisting on explicit guarantees for improved student performance (Dierker, 1995).

Some others have a more pessimistic view of computers. Cuban (1996) argued that new technologies had a history of creating false hope in terms of how they could transform the classroom landscape. Cuban believed that "...as successive rounds of new technology failed their promoters' expectations, a pattern emerged. The cycle began with big promises backed by the technology developers' research. In the classroom, however, teachers never really embraced the new tools, and no significant academic improvement occurred. This provoked consistent responses; the problem was money, spokespeople argued, or teacher resistance, or the paralysing school bureaucracy. Meanwhile, few people questioned the technology advocates' claims. As results continued to lag, the blame was finally laid on the machines. Soon schools were sold on the next generation of technology, and the lucrative cycle started all over again" (as cited in Oppenheimer, 1997).

While some of the issues raised by the critics are warranted, the question of why technology failed in the classroom needs to be addressed. Many technologies have failed because the cost of producing learner-friendly programs has been prohibitive. The availability of suitable personnel and resources for such purposes has also been an inhibiting factor. For the production of radio and television programs for instance, there has always been a need for the intermediaries who are specialists trained in program production. Consequently, the development of programs has been out of the teacher or educator's hands.

The internet on the other hand enables educators to reach their learners effectively and efficiently with minimal training and software requirements. It uses the computer but is more than computer-based learning. Does the internet have a greater potential for success when other technologies have not been so successful? McInerney and McInerney (2002) pointed out that merely using a computer might not be sufficient to create a positive cognitive change. Other research has suggested that cognitive effects could be devised to direct the user's mental efforts on abstract thinking skills and strategies when engaged mentally (McInerney & McInerney, 2002; Salomon, Perkins & Globerson, 1991). The simplicity of internet technology creates a far greater chance to engineer cognitive changes in learners than any of the other technologies.

Educational technology is dramatically changing the lives of both teachers and students. By the term educational technology, it is referred to a family of associated technologies, all of which involve information storage, retrieval, processing and display. At a more tangible level, the term includes the use of computers and educational software in the classroom and in the laboratory, the Internet and other forms of telecommunications, CD-ROMS, videodiscs, internal e-mail, voice mail, and video production and display.

Technology is, in fact, becoming an agent of change as schools examine for restructuring their programs and their overall philosophies. Many educators believe that it is increasingly important to provide students with challenging questions and to teach them the skills needed to access worldwide resources, and the networking skills that they might use to answer the questions presented to them. Sapp (1996) believed that educators must teach students to search, retrieve, collect and exchange information, and then to analyze and assimilate the information and to write their own research findings. These skills will enable students to become lifelong learners, rather than students who complete their education when they leave the halls of learning. The extent to which educators and administrators are able to understand the implications of technology in learning will also determine how much financial support is dedicated to this.

Educational technology is also proving to be an exciting and effective way of giving students of all abilities and backgrounds more educational opportunities. For instance, assisted or remedial technology may permit a child with cerebral palsy to move a cursor through eye

movement, or provide a safe way to communicate for an autistic child for whom face-to-face contact is difficult.

Technology is neither good nor bad in itself, nor should it dictate educational goals. A pencil can be used to write number one best sellers or to copy someone else's homework. The Internet can be used to produce enlightenment or hatred. Multimedia can be "canned" presentations that are available from publishers or well thought-out presentations designed by instructors. Before embracing any new technology, we need to declare our educational goals and to demonstrate how a particular technology can help us to achieve those goals (Gardner, 2001).

This section examines the internet technology and answers the questions of what the internet and WWW are, who is using them, how they are used and why become a user of them. At the end of the section, reasons that support the internet technology will be explained.

2.4.1. The Internet and World Wide Web's Role in Educational Technology

The Internet has revolutionized communications, bringing about new relationships between ordinary people, business enterprises, government agencies, and all other consumers of ideas and products throughout the world.

The Internet offers an interactive means of connecting teachers with multimedia resources, peers, and professional development leaders. For example, two web-based projects at the Harvard Graduate School of Education connect teachers and professional developers with research-based resources, teacher-designed curriculum models, and forums for collegial exchange. One project, Active Learning Practices for Schools (2001), aims to support teachers in using educational approaches developed through research at Harvard's Project Zero. The second, Education with New Technologies (2001), developed at the Educational Technology Center at Harvard by faculty and graduate students, uses a research-based framework called Teaching for Understanding as a structure for integrating new technologies with practice.

The Internet is a gateway for a rich source of potential teaching aids that can be used to enhance the classroom lectures as well as the practicals. The majority of the material can be

accessed free of charge or for a small registration fee. In addition, most of the resources can be displayed with a computer and some form of projection system.

2.4.1.1. What is the Internet?

Lubka and Holden (2000) described the Internet as “the world’s biggest computer network, connecting millions of people and organizations in a global information society.” In its most basic definition, the Internet is a network of networks (Kindall, 1994).

The Internet came into being in 1969 when the U.S. government and the academic community created a set of unifying protocols and tools that allowed them to interlink computer networks. Other interest groups built their own networks using similar communication protocols, while the researchers began to investigate means through which these networks could communicate (Kroll, 1992).

During the early years, scientists and institutions that had government contracts made up most of the users. By the mid 80’s however, many businesses, and educational and commercial networks had come on board as access became more widespread and as thousands of individuals began using the internet. Today it is estimated that there are over 200 million internet users. Eighty percent of the participants are North Americans, but every continent is now on the ‘Net’ – even Antarctica (Lubka & Holden, 2000).

Alden and Curyea (1994) portrayed the Internet as an interconnection of thousands of computers through telephone and cable lines that enables users to send and receive large volumes of information at phenomenal speeds throughout the world. Users find their way to the information highway through commercial on-line services or through public networks, such as state departments of education and military networks. Independent bulletin board services that have a specific focus, such as school districts, are also popular services. Consumers can share research findings and other types of information with anyone on the network. The shared vision of those who designed the Internet is for this resource to connect individuals, businesses, educational resources and homes around the world.

The number of individuals, companies, schools and communities gaining access to the Internet is growing so dramatically that it is nearly impossible to maintain current statistics. In

a project called “Basic Education Connection”, cable giant Tele-Communications Incorporated and Bell Atlantic Corporation joined to provide 26.000 U.S. schools with connections to the national connection highway (Salvador, 1994b). A number of cable companies have begun to offer educational services via Internet, hoping that more schools will access networks via cable rather than telephone lines (Salvador, 1994a). In addition, Americans with phones in their homes are charged a federal universal service fee that goes toward connecting all U.S. schools to the Internet.

In practical and functional terms, the Internet is;

- A 24-hour nonstop global forum and communications system
- An online library and international information system
- A business and corporate communications medium
- A distance learning and remote education system
- A commercial transactions medium
- A multimedia delivery information service
- All of the above simultaneously (Irvin, 1997).

The Net has helped create the electronic ‘global village’ that the early users imagined in the late 1960s. With a simple mouse click, anyone connected to the Internet can access information from across the world more quickly than it takes a TV set to warm up. The Internet is a tremendous resource for educators, providing experimental data, software, multimedia technologies, and communication links with libraries and educators. It can be a stimulating instructional aid in the classrooms. The resources found on the Internet can greatly assist the courses by making topics more interesting, challenging and thought provoking, and thus ultimately promoting student outcomes.

2.4.1.2. What is the World Wide Web?

It is hard to pick up a magazine or watch the news and not find the references to the World Wide Web. Every major corporation and information service now commonly advertises addresses for Web pages (their URLs). Many newspapers and magazines are available on the Web in multimedia versions that have no print equivalent. Website URLs

have replaced fax numbers and even e-mail addresses as priority information on business cards.

The World Wide Web (WWW) or 'the Web', as it is often called, is the fastest growing service on the Internet. It is truly a multimedia presentation. A web page has all the aspects of sophisticated desktop publishing: diverse typefaces, charts, icons, integrated graphics, sound, movies and now 3-D or virtual reality graphics. In just a few years, it has become an integral, and for some, an indispensable part of the culture. Irvin (1997) defined the Web as the Internet's interactive multimedia delivery system. The Internet is about moving information efficiently and reliably across a large network, and the World Wide Web expands on this principle by creating a uniform way of delivering and displaying this information.

Some people, however, still don't quite realize that the Internet and the World Wide Web are not the same thing. The confusion is understandable; since "WWW" seems to appear everywhere these days and even non-computer users know it refers, somehow, to the Internet. The Internet itself is the underlying communications framework, a massive network of hardware and software. On the other hand, the World Wide Web, like e-mail, is an application – a specific use built atop the communications facilities provided by the Internet (Irvin, 1997).

Students have the opportunity to more actively use the communication potential of the Internet by publishing their work on the Web. Students are thus able to share their work with the others and researchers around the globe and to receive feedback from new sources. The students' web pages have the added benefit of serving as an electronic portfolio, something that students can continually update.

The Web has shattered the boundaries of traditional communications. E-mail and online discussion groups allow everyone to communicate with a wide range of people. In addition to reaching friends and acquaintances, one can easily connect with people one doesn't know but with whom one shares an interest.

Teachers, students, parents and administrators can present their own ideas, their teaching and learning strategies and materials, for the entire world to see. In doing so, they are creating a large body of educational material. It is possible to publish graphics, animations,

videos, and sound as well as multicolored text (Klotz, 2001). In all educational subjects, this diverse potential can serve the needs of a variety of users.

Researchers all over the world are now using the World Wide Web not only as an efficient source of information but also as a repository for their own data. This creates an enormous database of the most up-to-date information, which can be easily accessed by classes with an Internet connection (Seitz & Leake, 1999). The ease-of-use factor and the move from text-based to graphical interface have made the WWW a driver for the tremendous leap in Internet use.

2.4.1.3. Who is Using the Internet and World Wide Web?

The issue of who has access to the Internet is becoming more critical each school year. One concern for those in administrative positions is the issue of equity. In his 1993 book, *Big Dummy's Guide to the Internet*, Griffin posed the question, "If we live in an information age, are we laying the seeds for a new information underclass, unable to compete with those fortunate enough to have money and skills needed to manipulate new communications channel?" (as cited in Proctor & Allen, 1994). Recent studies by Lance and Krashen exploring the impact of the availability of library resources and voluntary student reading on academic achievement have reached a powerful conclusion: student achievement is directly linked to the availability of resource materials (as cited in Giagnocavo, Mclain, DiStefano & Sturm, 1995). These studies have tremendous implications for those interested in the equity issue. Are the poorer or smaller community schools that either do not have access or have limited access to these worldwide resources destined to produce students who leave their schools and move on to universities or into the workforce with an automatic handicap? In a 1995 *Time Magazine* article, reporter Suneel Ratan quoted Mitch Kapor, co-founder of Lotus Development Corporation and now president of the Electronic Frontier Foundation, as saying, "those who do not access to the Internet will become the major conduit through which we conduct our lives. Any disenfranchisement will be severe".

2.4.1.4. How are the Internet and the World Wide Web being used?

Another concern to educators is how students are using the Internet. Chris Dede (O'Neil, 1995) maintained that the classrooms are already overwhelmed by too much

information. The challenge is to translate access to vast archives of information into personal knowledge in a generative way. That is, the learner must investigate, collaborate and construct knowledge for him/herself. While assimilation of knowledge is necessary, it is only the beginning step in learning. Students have the opportunity through the Internet to make more decisions, about their own learning. Many students are participating in international research projects, multimedia research papers, global discussion groups, transcontinental art projects and writers' groups.

The internet generally falls into three broad categories: (1) communication, (2) information access, and (3) file transfer (Alden & Curyea, 1994). The problem for teachers becomes how to bring this technology into the classroom using the most educationally sound practices.

1- Communication: The most common method of communicating online is through e-mail. The "e" in e-mail stands for electronic. E-mail allows everyone to communicate with a wide range of people. With the developments in this field, more and more people are communicating via web pages, not only among themselves but also with students.

Users may transmit personal messages from one person or user group to other individuals or groups. The sender may include files, sound and graphics with the e-mail message, it is transmitted instantly (Proctor & Allen, 1994). In the area of communication, the internet provides the greatest potential for a true global classroom (Caudell, 1994). Instant access to news, entertainment and services is already commonplace, and the walls of the classroom could literally disappear as the world itself becomes the classroom for our students.

One of the advantages for students working with e-mail is that electronic communication can be a great equalizer. What students say and how they say it, is more important than superficial qualities such as socio-economic standing, looks and skin color (Alden & Curyea, 1994). The use of this technology encourages the independence and autonomy necessary for students to achieve in their learning process (Proctor & Allen, 1994).

Another benefit from students communicating online is that they can practice their reading and writing skills on a daily basis, reinforcing classroom lessons. They can also experience and practice collaborative learning through this participatory design approach

(Silva & Breuleux, 1994). Electronic publishing through the internet enhances and expands the learning process as students realize that others in the global internet community, as well as in their immediate communities, are viewing their published works. Giagnocavo et al. (1995) believed that this realization empowers students and encourages them to strive for excellence in their work.

The same process, by which a single e-mail message can be directed to another person, can also be used to distribute documents to groups. This process is known as a mailing list. Individuals subscribe by e-mail and receive material periodically via e-mail. One such program is called a LISTSERV and is usually administered by a computer (Kurland, Evers, & Sato, 1997). Professional groups, online newsletter and magazines, and other information and advocacy services use mailing lists.

Through mailing lists, a single person or central authority produces documents for distribution to subscribers on a fairly regular basis. Discussion groups offer another form of internet communication. They are more like a giant 'bull session'. Anyone can contribute a message, which is then forwarded to all subscribers. Any group of people with a common interest can form a discussion group. Groups have been formed to discuss new software programs, research interests, hobbies or political issues (Kurland et al., 1997). Some discussion groups forward all correspondence; some are moderated by an individual to assure the relevancy of the discussion, while others incorporate messages into a periodic newsletter. Some groups are open while some have membership restrictions (via password).

Newsgroups offer yet another form of internet communication. Mailing lists and discussion groups are emailed to individual subscribers, and then posted on a variety of independent networks for anyone to read and respond. Newsgroups provide a forum through which people can read, gossip, debate and discuss shared interests.

Talk and chat programs are two internet communication programs that do not rely on e-mail. Although somewhat similar in their effect, talk programs allow two people to 'talk' by typing remarks back and forth without exiting their screens while chat programs are simply group talk programs. Participants can often choose from a list of available chat groups. They can enter or exit a discussion at will, identified only by a nickname they have selected.

2- Information Access: The internet expands the walls of the school building by offering access to resources from around the world. Individuals and organizations today can access literally billions of pages of information from all over the world. Students as well as teachers are able to tap into databases, library catalogues, national poll results and many other resources, downloading files onto their own computers. Students are able to understand the concept of global cooperation first hand, as they speak to experts in their research domain who may even happen to live in another country. Imagine the excitement and learning opportunities of a community college science student researching AIDS treatment, speaking in real time to a French research physician working in a laboratory. Access to these resources can yield individual and group projects, collaboration, curriculum materials and idea sharing not found in schools without internet access (Proctor & Allen, 1994). Problem-solving activities become more dynamic pursuits for students as the world opens to them through information searches, simulations and social action projects accessible through the internet (Harris, 1994).

One of the concerns in the area of information access is the question of appropriateness of materials. Schools are wrestling with technical codes of conduct and use policies as well as revisiting policies concerning censorship (Flanders, 1994).

3- File Transfer: Through file transfer, users can copy files from one computer to another. Teachers of any subject can share curriculum material, survey instruments, in-service plans and any other file they may wish to send or receive. Researchers can download huge documents to study in-depth in their own homes. Large files can be compressed and expanded later if they are connected to a commercial or independent internet service provider. Again, the problem of appropriateness of materials becomes an issue, as students are able to download pictures and text materials that are targeted at adult audiences.

2.4.1.5. Why Become an Internet and World Wide Web User?

In addition to knowing who is using the internet and how, educators have to ask themselves why they should become users of this new technology. Sapp (1996) said, “students need access to the technology and information of today to know how to benefit most from tomorrow’s information and technology sources”. While the idea of change itself is sometimes threatening to educators, resistance to advanced technology use is more complex.

The overriding question for educators is always, “how will this innovation impact on student learning?”. A great deal of new research is available on issues relating to learning. In the 6th edition of the Encyclopedia of Educational Research, Jones (1992) identified eight variables in learning and instruction;

- 1- a vision statement,
- 2- the tasks that ultimately define the nature and level of achievement as well as the curriculum,
- 3- the assessment principles and practice,
- 4- the instructional model,
- 5- the characteristics of the learning context including the nature of the learning environment, and the nature of the relationship among teachers and students,
- 6- grouping arrangements,
- 7- the learner roles,
- 8- the teacher roles.

The internet becomes a force, not only for those collecting research concerning its role in education, but also in its relationship to the eight variables in Jones’ study.

According to Appalachia Regional Educational Laboratory study (Balow, 1998), classroom use of the internet isn’t just a glitzy, expensive way to access information; it has a place in meaningful instruction. Student and teacher accounts argue that the ‘Net’ provides more timely information and allows for more authentic learning tasks than do texts. Balow gives the following reasons for introducing the internet into the classroom:

- Accessing timely information
- Providing authentic learning tasks
- Making connections with the material and social worlds
- Learning through extended information
- Interacting with local communities
- Improving students’ language and writing skills
- Energizing students’ learning
- Encouraging exploration

- Stimulating inquiry

2.4.2. Reasons Supporting the Internet

Rowe (2001) believed that the internet could influence the world to the same extent as the Industrial revolution. He pointed out that digital revolutions in computers, communication and convenience could significantly accelerate global changes this century. Rowe's suggestion of a global change when applied to a classroom situation generates new and unseen challenges.

How to define or describe learning which incorporates the internet is a challenge in itself. Definitions and descriptions vary between individuals. For instance, e-learning has been defined as a wide set of applications and processes that use electronic media such as computer-based learning, virtual classrooms and digital collaboration to deliver education and training (Eklund, Kay & Lynch, 2003). Online or web-based learning is increasingly understood to be a subset of e-learning. Mayadas (2001) believed that there were two types of online learning – self-study and interactive. Allen and Seaman (2003) defined courses based on their online contents as follows; 1% to 29% online content was termed a web-facilitated course, 30% to 79% was a blended or hybrid course and an online course had greater than 80% online content.

Numerous researchers have pointed out that there was a lack of consistent evidence to either support or oppose the advantages of using these new technologies in education (e.g., McInerney & McInerney, 2002). Such findings were expected in view of the fact that the internet was still in its infancy and there were countless ways in which it could be implemented in education. This part of the study outlines reasons supporting this new technology and suggests why the future for online learning and teaching appears quite positive. Eight reasons are outlined below.

- Many have access to the internet

In the last 15 years, there has been a significant growth in the home and school computer market (Rowe, 2001). In a report called “Internet Report of the World and Turkey, 2007”, active internet users in Turkey are 16.007.200, and with this number of internet users Turkey is the 16th country having the most number of internet users. United States of

America is the 1st country in the list having nearly 211 million internet users. 16,9% of the total population of the world is using internet which means 1 billion 114 million 275 thousand people (<http://serdarkocaoglu.com.tr/2008/03/dunyada-turkiyede-internet-kullanimi.html>).

Eklund, Kay and Lynch (2003) predicted that in ten years time the ICT landscape would change substantially. They believed that laptops will have a larger market share, mobile phones will form the basis of “M-learning” and successful e-learning technologies in homes and businesses will dominate teaching and learning practices. E-learning has been embedded in policies of many organizations and there is a need for schools and other educational institutions to produce lifelong learners who can successfully transform these policies into reality in the future.

- **The internet blends in with popular theories of educational psychology**

According to Salomon (1998), technology was growing at such a pace, that for the first time it was outpacing pedagogical and psychological theory. Wang and Bonk (2001) also pointed out that human cognition and the social context of thinking were essential prerequisites in the success of technology-based learning environments. Hence, any of the ICT had to connect successfully with theories of educational psychology.

In the past 100 years, teaching and leaning practices in classrooms have been guided by the ideas and theories of numerous educational psychologists. Prior to 1970, good education in the classroom was dominated by the theories of Behavioural Psychology whereas the present day focus is more on the theories associated with Cognitive Psychology which appear to be a better approach to preparing students to become lifelong learners (Conway,1997).

Behavioural psychologists, Watson and Skinner proposed their theories of Classical conditioning and Operant conditioning respectively (Schell & Hall, 1979). Their theories suggested that human behaviour was primarily a result of experience. They believed that teachers could link together responses involving lower-level skills and create a learning chain to teach higher-level skills (Conway, 1997).

Jean Piaget and Lev Vygotsky believed that learning was an intended process of constructing meaning through experience (McInerney & McInerney, 2002). However, Piaget and Vygotsky explained the manner in which this meaning was constructed differently. Piaget believed that a child's intellectual ability was linked to his or her developmental maturity. He believed in the importance of unstructured experiences and self-initiated discovery for children's cognitive development (McInerney & McInerney, 2002). McInerney and McInerney (2002) also pointed out that Piaget believed that higher mental processes were typified by structured activities and cognitive development occurred independently of language development.

Vygotsky proposed that all learning took place in the zone of proximal development (McInerney & McInerney, 2002). This zone was the difference between what a learner could do alone and what he or she could do with assistance from other individuals (Vygotsky, 1978). By building on the child's experiences and providing moderately challenging tasks, teachers were in a position to provide intellectual scaffolding to help children learn and progress through the different stages of development (Conway, 1997). Research by Salomon, Globerson and Guterman (1989) and Salomon, Perkins and Globerson (1991) on computer-designed reading activities led to improved outcomes in not only reading but also essay writing skills. They pointed out that the computer in this instance acted as a "more capable peer" by enabling "mindful learners to engage in cognitive processes of a higher order than the ones they would display without this partnership" (Salomon, Perkins & Globerson, 1991). However, for learners to achieve the desired outcomes, the technology must provide unambiguous human-like support. McInerney and McInerney (2002) pointed out that while the theories of Piaget and Vygotsky varied, they both believed in the active involvement by children in learning.

Piaget and Vygotsky believed in the process rather than the product of learning (McInerney & McInerney, 2002). The importance of peer interactions during the process was important. They emphasized the need for designing learning experiences that were relevant to real world scenarios and catered for individual differences between learners. Numerous technical options on the internet offered flexibility, which created opportunities for real world experiences and addressed the needs of individual learners. For instance, the use of virtual reality and live Web cams creates two unique opportunities for learners. Firstly, it enabled learners to interact actively with their learning environments and

secondly it allowed theoretical concepts to be connected with concrete ones (McInerney & McInerney, 2002). It supported Piaget's idea of "experience with the world" for a learner's intellectual growth and it supported Vygotsky's emphasis of "active involvement in learning and the value of auxiliary stimuli" (McInerney & McInerney, 2002).

School curricula have also been influenced by other views of intelligence and cognition. Howard Gardner's theory of multiple intelligences proposed nine intelligences that were shaped by time, place and culture in which the individuals developed (McInerney & McInerney, 2002). These intelligences are linguistic, logical-mathematical, musical, artistic, spatial, bodily kinesthetic, interpersonal, intrapersonal, naturalist and existentialist. Gardner also believed that each of the intelligences evolved independently of the others (McInerney & McInerney, 2002).

In most modern societies, intelligence appears to be directly proportional to performance in schools and especially in subjects like mathematics and the languages (McInerney & McInerney, 2002). Gardner's theory has challenged the traditionally held views of intelligence. While in some school subjects learners have an opportunity to express their competence in tasks that draw on various intelligences, in some others, such opportunities were rare. Conway (1997) pointed out that by giving students a chance to demonstrate their abilities through a wide variety of intelligences, it boosted their confidence and enabled them to undertake learning tasks with increased confidence. Three of Gardner's ideas can be addressed by a suitable designed website (McInerney & McInerney, 2002). Firstly, he emphasized the importance of mentoring practices in a social framework in which a learner's intelligence develops. A suitable developed website can perform the task of a more capable peer by providing human-like guidance. Secondly, such a development should occur in an authentic environment. The use of virtual reality and web cams create authentic environments. Thirdly, learning should have an interdisciplinary approach. a well-designed website with suitable hyperlinks promotes nonlinear thinking (McInerney & McInerney, 2002). It not only links the pages or concepts within the site, it can also be linked to other suitable sites globally which do not have to be related to the same discipline. The use of a suitable search engine opens a world, which goes well beyond the confines of any traditional classroom or textbook.

- **The internet supports different teaching and learning styles**

Students' learning styles, their motivation and their prior experience often dictated their ability to learn (Roblyer, 1999). In a traditional classroom, catering for a variety of learning styles can be a challenge. Web-based learning on the other hand has a greater flexibility. According to McInerney and McInerney (2002), intellectual partnerships with computers distribute the resources between persons, situations and tools. Conway (1997) outlined four ways in which educational technology supported specific techniques of teaching and learning.

1. Direct Instruction / Explicit Teaching

In this approach, students are presented with materials in small steps followed by checking for their understanding. The approach enabled active and successful participation of all students. This model of instruction was classified as a transmission model (as opposed to information-processing model) which was well grounded in the behaviourist theory. According to Rosenshine (1986), the following steps formed the basis of the explicit teaching approach – daily review, presenting new material, guided practice, corrections and feedback, independent practice, and weekly and monthly reviews. While such an approach worked with teaching facts, concepts, vocabulary and map skills, it was found to be less relevant for teaching in areas that were less well-structured (Rosenhine, 1986). These included areas such as teaching composition, reading comprehension, analyzing literature and historical trends.

2. Cooperative / Collaborative Learning

In this cognitive approach to learning, academic materials are mastered through collaborative group work. The teams consist of learners of varying abilities, gender, and cultural backgrounds. Reward systems are group-oriented rather than individually-oriented (Conway, 1997). This approach has many variations. Two of the ways described by Arends (1994) included the Student Teams Achievement Divisions (STAD) in which students were either given worksheets or assigned other educational tasks. They work as a group and helped each other to learn. All students individually took a weekly quiz that gave them an improvement score. This score measured the extent to which it exceeded student's past average and all teams strived to get a good team

improvement score. The jigsaw approach was the other method. In this case, each member of the team was expected to become an expert in one aspect of the academic task which was assigned to the group. It was then his or her responsibility to teach the others in this group the appropriate aspect of the task. Members from other teams who were experts on the same topic also shared their acquired skills and knowledge to help each other and this information was then relayed back to their own group members. At the conclusion of the exercise, each group presented its findings to the class.

3. Discovery Learning

Jerome Bruner was very closely associated with the discovery learning approach. The philosophy of this method of teaching is embedded in cognitive psychology and this approach hinged on the belief that students were more likely to remember concepts which they discovered on their own (Conway, 1997). According to Roblyer, Havriluk, Edwards and Havriluk (1997) teachers found discovery learning to be more successful when students had the prerequisite knowledge and underwent some structured experiences.

Modern technology utilizes the internet and enables students to take virtual tours, virtual field trips and explore new surroundings, make new discoveries and draw conclusions. Participation intensified the learning experience (Dierker, 1995). The internet created new learning opportunities by enabling individual learning experiences. It also enabled students to venture beyond the walls of their classrooms and had the potential of enabling students to interact with others across the globe (Dowling & Harland, 2001).

4. Cognitive Apprenticeship

Cognitive apprenticeship is a method of teaching which aims to show learners the steps followed by experts to handle complex tasks. Wang and Bonk (2001) proposed a framework for electronic cognitive apprenticeship, which included modeling, coaching, scaffolding, articulation, reflection, exploration, questioning, task structuring, performance feedback or management, and direct instruction. This approach to learning was initially proposed by Collins, Brown and Newman (1989) who pointed out that; “the reason that Dewey, Papert and others have advocated learning from projects rather than from

isolated problems is, in part, so that students can face the task of formulating their own problems, guided on the one hand by the general goals they set, and on the other hand the interesting ‘phenomena’ and difficulties they discover through their interaction with the environment.”

- **The internet engages learners as active participants**

Taylor (as cited in Saddik, 2001) pointed out that the most valuable aspect of using computers in education was that students were engaged as participants in the process of learning rather than as spectators. This view was also echoed by Billing (as cited in Fowler, 1995) who suggested that self-paced learning led to a student-centered system because students were actively interacting with a vast amount of information. Arsham (2002) described the value of the internet in this regard as “a web-based class is a more effective learning experience, since the learner is participating in learning process and receives individual attention... The web-based learning atmosphere allows more effective interaction between students and instructor... it can be as effective as traditional classroom.”

Campos, Laferriere and Harasim (2001) studied the teaching practices in more than one hundred mixed courses in the USA and Canada which used asynchronous electronic conferencing in post-secondary settings. Their findings suggested that the educators were re-discovering new technologies that were reinvigorating their enthusiasm for teaching. Networked classrooms were creating opportunities for collaborative knowledge construction and building. Campos, Laferriere and Harasim described these networked classrooms as socio-cognitive mixed-mode learning spaces where the teacher and the learner had central roles in pedagogical actions. It was also an environment where the educator intervened to promote collaborative knowledge sharing (Campos, Laferriere and Harasim, 2001).

Asynchronous learning networks (ALN) did not give learners spontaneous access to a facilitator but it did work well for those students who were shy and did not ask questions in class. It gave them an opportunity to think through their questions and forward it by the calmer medium of electronic mail (Gomory, 2001). In an asynchronous interaction using web-based conferencing, Jarvela and Hakkinen (2000) found that there were different

levels of interaction. Higher levels of perspective talking led to higher levels of discussion. In ALN environments, courses with a laboratory component could be a problem but instant feedback to homework and an accessible user-friendly website greatly sustained student interest (Gomory, 2001).

- **The internet enables teachers to cater for a variety of student needs**

Gardner stated that “the biggest mistake of past centuries in teaching has been to treat all children as if they were variants of the same individual, and thus to feel justified in teaching them the same subjects in the same ways.” (as cited in Siegel & Shaughnessy, 1994).

Sarason (1993) believed that there was an overwhelming desire amongst learners to engage in learning with different teaching methods. According to Sarason, the present “one-size fits all” delivery system where everyone supposedly learnt the same thing at the same time, irrespective of the learner’s needs, did not always optimize learning outcomes.

One of the ways in which the internet could address this issue was by creating a differentiated classroom. According to Tomlinson (1993), in such classrooms, teachers responded to learners needs by varying their teaching methods. By applying a variety of management and instructional strategies, teachers could appropriately modify the content, process or product according to the learners’ interests, readiness and learning profiles.

In a differentiated classroom, assessment was “today’s means of understanding how to modify tomorrow’s instruction.” (Tomlinson, 1993). Assessments were an ongoing process which did not appear at the end of a unit of work. Such assessments could be conducted by a variety of methods that in turn provided valuable data for creating a learning environment conducive to learners’ needs. A website with varied options suitable for learners with various abilities addresses the issue of special needs and has the potential to improve academic outcomes (McInerney & McInerney, 2002). The inclusion of online tests in websites also provided learners with valuable continuous feedback.

- **The internet motivates students to learn**

According to Jensen (1998), there were two groups of factors which influenced attention for learning. Learning which was relevant, offered choices and was engaging increased

intrinsic motivation. Such learning had the potential to capture learners' attention for 10 to 90 minutes. On the other hand, learning which lacked choices, was irrelevant and passive increased boredom and dislike. Such learning engaged learners' attention for 10 minutes or less.

Jensen (1998) also pointed out that the academic success of students depended on the ability of students to tune in like a radio to an exact, focused bandwidth. According to Jensen, priming also influenced learners' abilities to pay attention. Priming guided learners and prompted them to look for things in specific locations. Self-paced systems not only diagnosed learner's capabilities, but it was also customized and monitored the delivery that many learners found motivating (McInerney & McInerney, 2002).

A carefully designed website with suitable pedagogy has the ability to promote intrinsic motivation and enables students to tune in. It can also constantly prime students (through hypertext, eye-catching graphics and animation) to focus on the necessary information. In a traditional classroom, this may not always be feasible. Numerous studies have demonstrated positive influences of web-based learning on students. For instance, Chan, Hodgkiss and Chan (2002) developed a website to teach students fresh water ecology. While no comparison was made between web-based and traditional practicals, they reported that students enjoyed such an approach and they found that their interest in ecology was enhanced.

- **The internet removes time constraints of learning**

Until recently, learning in traditional schools has been dictated by school hours and lesson times. The internet has overcome this barrier by enabling motivated learners to access websites at times and locations convenient to them.

The internet had redefined the opening and closing hours of teaching and learning. Referring to internet, Newt Gingrich, a former speaker in USA House said that by making education available twenty-four hours a day, seven days a week, learners could literally have a different attitude towards learning (as cited in Oppenheimer, 1997).

- **The quality of learning outcomes was encouraging**

In a survey by Allen and Seaman (2003), 57% of the academic leaders believed that online education learning was capable of producing learning outcomes which were either equal to or better than the results obtained through face-to-face instruction. The internet could be used to support a variety of teaching and learning styles. In higher education, there was optimism about this new technology because there was a growing body of evidence, which suggested that the online model of teaching worked and produced desirable outcomes (Gomory, 2001; Mayadas, 2001). According to Mayadas, learning via the internet encompassed a balance between three key elements; learning materials, access to a facilitator and interaction between the learners. These three elements were also essential for the success of students in traditional schooling. While an ALN is an attempt to reproduce the basic elements of classroom teaching, it is certainly not the same as classroom teaching (Gomory, 2001). In such environments, the internet acted as a medium for distributing learning materials (Mayadas, 2001).

Dutton, Dutton and Perry (2002) found that while lecture and online students had different characteristics, their performance in courses was also different. Online students obtained higher grades but the researchers pointed out that the effect was not statistically significant. Homework completion had a positive correlation with both modes of delivery. They also found that prior computer experience improved grade performance and age had almost no influence. The researchers pointed out that since their research was conducted in a computer course, students undertaking online learning were probably more computer literate than were students in other disciplines. Consequently, the findings of the study reported by Dutton, Dutton and Perry may not be replicable in other disciplines.

Holland (2000) also reported that learning effectiveness was the same in both types of courses and students learned well when they understood the work and sufficient resources were provided. While students had a positive attitude about their online course, Spiceland and Hawkins (2002) found the students enrolled in this mode held a less than favourable response in their ability to learn when compared to traditional classroom settings. They also suggested that an active learning format could enhance learning. Parker and Gemino (2001) studied the difference between the learning outcomes of students enrolled in a third year Business Administration course in a traditional “place based” and in an online “virtual seminar” mode. The course had two objectives. Firstly, students had to understand the nature and the importance of the role of a system analyst. The materials associated

with this objective were abstract and conceptual in nature. The second objective dealt with the use of technical tools. The researchers found that students who enrolled in the virtual seminar mode scored significantly higher in the conceptual section of the final exam than those in the place-based mode. The results were reversed in the technical section. Parker and Gemino (2001) suggested that the best of both worlds should be incorporated in teaching and their suggestion leaned more towards a blended approach.

Wegner, Holloway and Garton (1999) reported that there was no difference in the academic outcomes of those who were enrolled in an online mode from those enrolled in the traditional mode. While the statistical analysis of the data gathered on students' perceptions was not statistically significant, general observations suggested that students in the online group had a more positive feeling about their experience. They pointed out that the novelty effect of the medium could have influenced students' experiences. In a research focused on the dimensions of successful online learners, Schrum and Hong (2002) identified seven dimensions. These were;

- access to tools,
- technology experience,
- learning preferences,
- study habits and skills,
- goals or purpose,
- lifestyle factors,
- personal traits and characteristics.

They also proposed online teaching strategies such as frequent interaction, collaboration, question-asking Forums and minimizing technology requirements as important variables in the success of these learners.

Students became upset and anxious if they encountered technical problems and this led to a lost learning opportunity (Holland, 2000). Students also expected frequent involvement of the instructor who responded accurately to their concerns in a timely manner. While designing collaborative learning activities was a challenge, Holland (2000) found that many students did not know how to collaborate even though they were at university level

and discussions tended to become a conflict between quality and quantity. Lack of good real-time interaction support tools also restricted communication.

The Sloan consortium has provided more than 4,000 faculty-semester of ALN teaching experiences and the organization had in excess of 100,000 enrolments in 2001. According to Gomory (2001), students not only took courses, they were actually learning and, without exception, off campus and on campus groups usually scored the same. While Gomory's conclusions were based on his observations with a large number of students enrolled in an off-campus mode of learning, the findings could vary significantly because there are many variables which could influence the outcomes of an internet-based learning environment.

Taking into account these important aspects of internet technology, this study tries to find whether the internet is a useful teaching tool in Turkish primary schools for English language teaching as it is explained above.

CHAPTER III

METHODOLOGY

3.1. Overview

It is well known that internet is an environment in which millions of people can easily produce information and send them to the others. It has become a very fast and cheap system to use nowadays. For this reason it is an indispensable part of our lives. Students increasing in quantity in the schools as well as information to be learned, lack of teachers in number and the importance of individual differences are the most important factors in using the education technologies especially computers. Providing a great deal of data, easy access to the information and rich communication opportunities has made the internet the most usable education tool in learning and teaching processes. This can be defined with the term “teaching with the internet”. It is some kind of a model which can be used to cause students to gain new information and skills, and to enrich the learning habits and experiences of them.

In nowadays internet and information technologies era, internet users have been increasing rapidly in the field of education especially in developed countries. Although Turkey is not a developed one, it reacts to this improvement in an expressive manner.

Within those improvement efforts, some projects have been put into practice. One of the most important of them is “Education via Computers Supporting Campaign” which is carried out by The Ministry of National Education and Turkish Informatics Industry Association (TUBİSAD). The aim of this project is to increase the quality of education and students’ success, to improve the capacity of education personnel, and to get the world informatics standards by establishing one million computers in education institutions (www.bilgisayarliegitimedestek.org).

Another project is to equip the institutions of Ministry of National Education (MONE) with internet and it is carried out by Ministry of National Education and Ministry of Transport. Within this project more than twenty thousand institutions of MONE has been equipped with internet access. In 86% of secondary schools (that is 95% of secondary school students) and 45% of primary schools (that is 82% of primary school students), nearly ten

million students can access to internet with three hundred thousand computers (http://www.meb.gov.tr/ADSL/adsl_index.html).

Although the investments in the primary schools of Turkey are encouraging, it can be said that systematic results can not be achieved since the internet technology is very young. There are (or most probably will be) several problems about using the internet in primary education in Turkey. These are such problems as groundwork, experienced manpower, integrating the programs and technology, security and financial matters. In solving the problems, a well-prepared program should be put into service.

This study is a survey which investigates whether the internet is being used in the primary schools as a teaching tool, if so in what ways it is used, the primary school teachers' customary use of internet and the attitudes of teachers towards internet resources such as e-mail, chat groups and World Wide Web. By answering these questions, the usefulness of internet technology in English language teaching can be examined.

This chapter of the thesis is focused on the methodology of the study. Within this chapter subjects, materials and procedure of the study and how the collected data has been analyzed will be explained.

3.2. Subjects

For this study, 14 primary schools were selected in Afyonkarahisar province. The reason for selecting those 14 primary schools was that they were settled in different parts of the city. So the schools were supposed to be different from each other in terms of the nature of education, profile of the students, the opportunities provided for the students and the attitudes of the teachers.

The questionnaire which is prepared for this study was applied to the English language teachers of those primary schools. But at the beginning of the study the number of English language teachers in the schools was not known. So it was not possible to know what amount of data would be gathered for this study.

3.3. Materials

For this study the necessary data was collected through questionnaire. In order to prepare the questionnaire for the study, a preliminary was done. The studies prepared in Turkey and in other countries were examined, some of the questionnaires were benefited and one of them was found useful since it had some similar sides as this study. That study was prepared by Filiz Cele. The aim of the study is to investigate whether use of internet resources in English language classes in Turkish universities is possible and is a viable option. The necessary permissions were taken from Filiz Cele and then the questionnaire prepared for that study was adapted to this study.

In the questionnaire, there are twenty one questions in five sections. In the first part, English language teachers are expected to give their personal information. In the second part of it, there are some questions about their computer knowledge. In the third part, the knowledge of the teachers about their students' computer use is asked. In the next part, they are given some information about internet resources and after that information they are asked to answer the questions about their beliefs and attitudes towards those internet resources. In the last part, the concerns of the teachers about internet resources are asked.

3.4. Procedure

After the questionnaire had been prepared, necessary permissions were taken from Afyonkarahisar Provincial National Education Directorate in order to apply the Teacher Questionnaire in 14 primary schools. The dates between 14.04.2008 – 11.05.2008 were the days of applying the questionnaire to English language teachers of the schools.

The questionnaires were distributed through on site visits to the related schools. The difficulties of the on site visits were that all of the schools were in different parts of the city and finding English language teachers since they all had different time tables in a week. It was the most difficult part of collecting data because sometimes it took a long time to contact with them. After the application of the questionnaire, the results of them were analyzed.

3.5. Data Analysis

For this study, the data collected through questionnaires from English language teachers of 14 primary schools were analyzed through both quantitative and qualitative means.

The results were shown in tables and responses to open ended questions were summarized. The details of the findings are presented in Chapter IV.

CHAPTER IV

DATA ANALYSIS

4.1. Overview

This survey study investigates whether the internet is a useful teaching tool in Turkish primary schools for English language teaching. To collect data for this study, a prepared questionnaire was adapted and it was applied to 32 English language teachers in 14 state primary schools in Afyonkarahisar.

It was aimed to get information about the use of internet in primary schools for ELT, teachers' customary use of internet, beliefs and attitudes of teachers about internet resources and the most important technical and pedagogical concerns in implementing the internet in English language lessons.

In this chapter, the analysis of the collected data and the interpretation of the results will be presented.

4.2. The Analysis and Interpretation of the Results

In the Teacher Questionnaire, there are five sections as; Personal Background, Computer Background, Student Computer Use, Beliefs and Attitudes, and Concerns.

For the study, 14 primary schools were chosen in the different areas of Afyonkarahisar city centre. The reason why those schools were chosen was that they were supposed to have different physical conditions and student profiles, since they are settled in different areas. So at the beginning, the number of English language teachers was unknown. After necessary permissions had been taken from Afyonkarahisar Provincial National Education Directorate, the questionnaires were delivered to English language teachers in the schools through on site visits.

The schools included within this study and the number of teachers working in the schools are shown in Table 1.

Table 1.

Primary Schools and Number of English Language Teachers (Question 2)

Number	Name of Primary School	Eng. Lang. Teachers
1	Atatürk Primary School	4
2	Kadayıfcioglu Primary School	1
3	Kasımpaşa Primary School	2
4	Gedik Ahmet Paşa Primary School	2
5	Hacı Hayriye Özsoy Primary School	3
6	Hoca Ahmet Yesevi Primary School	3
7	Hüseyin Sümer Primary School	2
8	Kadınana Primary School	2
9	Oruçoglu Primary School	3
10	Şemsettin Karahisar Primary School	4
11	Kocatepe Primary School	3
12	Özerler Primary School	1
13	Salar Atatürk Primary School	1
14	Salar Primary School	1
	Total	32

The first part of the questionnaire (I. Personal Background) is about the profile of the teachers; gender, experience and experience in current school. Table 2 shows the profile of the teachers with frequencies and percentages.

Table 2.**Profile of the Participants (Questions 1, 3 and 4)**

		Frequency	Percent (%)
Gender	Female	22	68,75
	Male	10	31,25
	Total	32	100
Experience	1 – 4 years	19	59,375
	5 – 9 years	10	31,25
	10 – 14 years	1	3,125
	15 – 19 years	1	3,125
	20 – 30 years	1	3,125
	Total	32	100
Experience in current school	1 – 4 years	27	84,375
	5 – 9 years	4	12,5
	10 – 14 years	1	3,125
	Total	32	100

As it is seen in Table 2, more than 50% of the participants in this study are female and the majority of the participants has been working as an English language teacher for less than 10 years. It can be an important factor in using new technologies in English language teaching because they can be more interested in using them in their courses.

Second part of the study (II. Computer Background) is about the necessary background of the study; if the schools provide computers for the teachers, if they have computers at home, if they use internet, if so for what reasons they use it and their customary use of internet resources.

Table 3.**Computer Background of the Participants (Questions 5, 6, 7 and 8)**

		Frequency	Percent (%)
PC at school	Yes	26	81,25
	No	6	18,25
	Total	32	100
PC at home	Yes	27	84,375
	No	5	15,625
	Total	32	100
Internet use	Yes	32	100
	No	-	-
	Total	32	100
Reason of using internet	Personal interest	-	-
	Occupational interest	-	-
	Both	32	100
	Total	32	100

By looking at Table 3, it can be stated that many of the participants have computers at home and their schools provide computers for them. It is significant to find that all of them are using computers for both their personal and occupational interest.

For the 9th question in Computer Background part, the participants were expected to give information about their customary use of internet resources such as e-mail, WWW or discussion lists. The ones who never uses internet were supposed to skip to question 11 without answering this question. Table 4 shows teachers' customary use of internet.

Table 4.

Teachers' Customary Use of Internet (Question 9)

	Daily		Weekly		Monthly		Yearly		Never		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Internet Resources												
Word Processing	5	15,625	15	46,875	10	31,25	1	3,125	1	3,125	32	100
E-mail	17	53,125	12	37,5	1	3,125	1	3,125	1	3,125	32	100
WWW	18	56,25	13	40,625	1	3,125	-	-	-	-	32	100
Discussion Lists	5	15,625	4	12,5	10	31,25	4	12,5	9	28,125	32	100
Internet Chat Groups	5	15,625	-	-	3	9,375	5	15,625	19	59,375	32	100
Electronic Journals	3	9,375	4	12,5	8	25	5	15,625	12	37,5	32	100
Other	-	-	-	-	-	-	-	-	-	-	-	-

It can be concluded from Table 4 that more than half of the participants check their e-mails every day, and many of the others check their e-mails once or twice a week. They are using World Wide Web most among them. Only one of the participants uses WWW monthly. It is important to find that more than 50% of the participants never use Internet Chat Groups. Some of them use Electronic Journals and Discussion Lists.

In question 10, the participants were asked to explain if they use computer and internet resources in English language teaching, and if so which ones are used and in what ways they use them. Most of the participants have stated that they use computers and internet for searching course materials, pictures, games and songs. They prefer to adapt them according to the level of their students. They prepare their exams and worksheets on computer, sometimes using internet. In order to prepare the materials they benefit from discussion lists to exchange their ideas with other English language teachers all over the world. Many of them use internet to get authentic materials from English web pages. To present the course topics, some of the participants use Microsoft Office programs especially Powerpoint presentations.

One of the participants sends e-mails to her students in order to teach them something unconsciously. Another participant saves all the necessary materials into a CD from internet and use it in the lessons since sometimes there may occur some problems with the internet connection.

Some of them think that it is important to share the knowledge and learn the others' experiences using internet. It is an easy way of finding several materials which are useful for English language teaching. They can find exercises, tests and exams prepared for English language courses using discussion lists. Some of the teachers have some e-mail groups where they can share all the materials they are using in their classrooms. So it becomes some kind of a digital library for English language teachers to benefit in their lessons.

In the third part of the questionnaire (III. Student Computer Use), the internet use of students in their schools, reasons of using internet and if they use internet resources for English language courses were asked to their teachers.

Table 5.**Student Computer Use (Questions 11, 12 and 13)**

		Frequency	Percent (%)
Internet at school	Yes	25	78,125
	No	6	18,75
	I don't know	1	3,125
	Total	32	100
Reason of using internet	Personal interest	3	12
	Doing homework	2	8
	Both	19	76
	I don't know	1	4
	Total	25	100
Using internet resources for English language learning	Yes	18	72
	No	7	28
	Total	25	100

It is clear from Table 5 that the students of many participants use internet at school. 76% of the participants have stated that their students use internet for both their personal interest and doing homework, and 72% of them has stated that their students use internet resources for English language learning.

In Question 14, whether the students use internet resources for English language courses, if so which ones are used and in what ways are asked to the teachers. Many of them have stated that their students use WWW and search engines to find information about their projects and homework. The students play interactive language and grammar games in computer laboratories. In some pilot primary schools, a new English language teaching software is being used now, called DynEd. In order to use DynEd they have to have internet connection. It is an interactive software with which a student can develop her/his English knowledge at own pace. They also use the internet to practice their knowledge with online quizzes or exams and sometimes listen to songs in English.

The fourth part of the questionnaire (IV. Beliefs and Attitudes) is about opinions and views of the teachers. At the beginning of this part some information related to 5 internet resources which can be used for English language learning and teaching was given and after that three questions about them were asked. The first question of this part, Question 15 is about the usefulness of these resources and the results for this question can be seen in Table 6.

Table 6.

Beliefs of Teachers about Usefulness of Internet Resources (Question 15)

Internet Resources	Frequency	Percent (%)
Electronic Mail	14	43,75
World Wide Web	23	71,875
Electronic Discussion Lists	12	37,5
Electronic Journals	7	21,875
Internet Chat Groups	15	46,875

As it is seen in Table 6, the majority of the participants think that World Wide Web is useful in teaching and learning English language. Nearly half of the participants think that Internet Chat Groups and Electronic Mail can also be useful in English language learning and teaching apart from WWW. Electronic Journals are thought to be the least useful internet resources among all of them.

The second question in the fourth part of the questionnaire, Question 16 is about the preferences of the participants about using internet resources. The information collected for this question can be seen in Table 7.

Table 7.

Preferences of Teachers about Using Internet Resources (Question 16)

Internet Resources	Frequency	Percent (%)
Electronic Mail	12	37,5
World Wide Web	18	56,25
Electronic Discussion Lists	10	31,25
Electronic Journals	7	21,875
Internet Chat Groups	13	40,625
None	-	-

By looking at Table 7, it can be stated that the most preferred internet resource is World Wide Web and the least preferred one is Electronic Journals. More than 50% of the teachers prefer to use WWW in their English courses. After WWW, they prefer to use Internet Chat Groups and Electronic Mail in their lessons for English language learning and teaching. It is important to find that more than half of the participants never use Internet Chat Groups (see Table 4), however nearly 40% of the teachers prefer to use them in their lessons.

In question 17, the participants' reasons of choosing the given internet resources in the previous question were asked. For World Wide Web, they have stated that it is easier to find materials compared to others and all the necessary things can be found. WWW are thought to make learning process effective and permanent and to motivate students. For internet chat groups, it is stated that the students are interested in chatting in English. E-mails and Electronic Discussion Lists are said to provide opportunities to communicate with other colleagues. Some of the teachers think that e-mail, internet chat groups and electronic discussion lists are the resources where the students have an interactive learning. Chat groups

and discussion lists are also seen as the environments where students can share their knowledge and learn together. E-mails can help students to write and communicate in English.

In the last part of the questionnaire, the concerns of the participants in implementing internet in English language courses were asked. The first question of this part, Question 18 is about the opinions of teachers about the problematic issues in this process and the results can be seen in Table 8.

Table 8.

Problematic Issues for Teachers (Question 18)

Issues	Frequency	Percent (%)
Training students to use computers and Internet	8	25
Training teachers to guide students in using computers and Internet	14	43,75
Getting technical help for fixing computers	18	56,25
Providing adequate number of computers	27	84,375
Lack of desire on the part of headmasters	8	25
Lack of desire on the part of teachers	10	31,25
Lack of knowledge on the part of headmasters	6	18,75
Lack of knowledge on the part of teachers	12	37,5
Other (quality of internet connection)	1	3,125
Other (lack of time in using computers for ELT)	1	3,125

It is obvious from Table 8 that the first problematic issue according to the participants of the questionnaire is providing adequate number of computers for students in the schools. In fact many of the participants' schools provide computers for both teachers and students (see Table 3 and Table 5), but the problem about the number of computers is that not each of the students has a computer. That is in many schools they have only one computer for every two students or more.

Another big problem is getting technical help for fixing computers, with a percentage of 56,25. After that, there comes training teachers to guide students in using computers and internet. It is also important to help students use computers and internet. So the teachers accept it as a problem and, meaningfully, after this they think that lack of knowledge on the part of teachers is the most problematic issue. This may be related to their lack of knowledge in computer and internet use and also about how to help the students in this field.

Apart from the given problematic issues for Question 18, two more issues are seen as problems in implementing the internet as quality of internet connection and lack of time in using computers for ELT.

The second question of the last part, Question 19 asked about the participants' ranking of the most problematic issues they chose for the previous question, Question 18. The results of this question can be seen in Table 9.

Table 9.

Ranking of Teachers' Concerns (Question 19)

Issues	Rank									
	1 st		2 nd		3 rd		4 th		5 th	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Training students to use computers and Internet	3	9,375	3	9,375	7	21,875	4	12,5	3	9,375
Training teachers to guide students in using computers and Internet	3	9,375	7	21,875	4	12,5	5	15,625	3	9,375
Getting technical help for fixing computers	6	18,75	8	25	5	15,625	4	12,5	2	6,25
Providing adequate number of computers	14	43,75	5	15,625	7	21,875	1	3,125	2	6,25
Lack of desire on the part of headmasters	2	6,25	1	3,125	2	6,25	3	9,375	4	12,5
Lack of desire on the part of teachers	2	6,25	4	12,5	2	6,25	6	18,75	11	34,375
Lack of knowledge on the part of headmasters	-	-	-	-	2	6,25	3	9,375	3	9,375
Lack of knowledge on the part of teachers	1	3,125	4	12,5	3	9,375	6	18,75	4	12,5
Other (quality of internet connection)	1	3,125	-	-	-	-	-	-	-	-
Other (lack of time in using computers for ELT)	-	-	-	-	-	-	-	-	-	-
Total	32	100	32	100	32	100	32	100	32	100

As it is seen in Table 9, the most problematic issue according to the participants of this questionnaire is providing adequate number of computers for each student in the schools. The second most problematic issue is training teachers to guide students in using computers and internet. Training students to use computers and internet and providing adequate number of computers were found to be the third most problematic issues by the participants. The fourth one is some kind of a self-evaluation of teachers and it is lack of desire and knowledge on the part of teachers. The last one is lack of desire on the part of teachers.

In Question 20, the ideas of teachers about the contribution of internet resources for English language learning is asked. The results can be seen in Table 10.

Table 10.

Teachers' Beliefs about Contribution of Internet Resources (Question 20)

		Frequency	Percent (%)
Contribution of internet resources	Yes definitely	11	34,375
	To some extent	20	62,5
	No, probably not	1	3,125
	Total	32	100

By looking at this table, it can be stated that many of the participants think that internet resources can add enough to classrooms for English language learning. More than half of the teachers think that internet resources can add to some extent and the most of the others think that they definitely add. Only one participant think they can not add enough to classrooms for English language learning.

In Question 21, additional comments of the participants about using internet technology for English language learning and teaching in primary schools are asked. Some of

the participants think there should be language classrooms in every school. One of the teachers has stated that internet is a very useful tool in teaching English but the important thing is that it should be used effectively in the lessons. Another one says we should put more emphasis on interactive language teaching, so that students see language learning as an enjoyable activity.

CHAPTER V

CONCLUSION

5.1. Findings

Focusing on primary school teachers' customary use of computer and internet as well as their students', beliefs and attitudes of teachers towards internet resources, how the internet is being used in English language teaching, the most important problematic technical, economic and pedagogical issues in implementing the internet technology in English lessons, and how the internet resources should be used for ELT purposes, this study aims to investigate the question of whether the internet is a useful teaching tool in terms of English language teaching in primary schools. The important findings of the questionnaire applied to English language teachers in the primary schools for this study are as follows;

- Internet is an effective and useful teaching tool for English language lessons. The students who are taught English with the help of internet and who are expected to use internet for their homework, are more successful and enthusiastic to learn English language than the others who are taught English without internet.
- The internet and resources of it are thought to make the learning process easier and effective.
- Many schools have internet connection and the students can benefit from the computers and internet for their researches, projects and homework. Many of the students use internet resources.
- The teachers have computers in their schools and at home, they are using internet for personal and occupational reasons. This is a positive aspect in using internet for teaching English language in the primary schools.
- The internet resources such as World Wide Web, E-mail, Discussion Lists, etc. are thought to be useful in English language teaching and learning, and they are preferred to be used in the courses.
- The problems for implementing internet in English language teaching process should be solved in the near future.
- The lessons which are accompanied by internet technology are said to be more motivating for the students in learning English language. With the help of internet,

the lessons become more enjoyable and valuable. It reduces the time to teach the topics.

- The internet helps the students who do not want to participate in the lessons, because they can learn the topics, search on the internet, prepare their homeworks easily and practice the topics they have learnt at their own pace.
- It is found to be useful for every learner whatever their learning type is (auditory, kinesthetic or visual). Teachers can find several activities for each student.
- With the help of internet technology, individual teaching techniques can become more available, which is a factor in student achievement.

5.2. Suggestions for the Teachers of English

By considering the results and findings of this study, the following suggestions can be offered to English language teachers;

- Newly graduated teachers should have the necessary knowledge for using internet and for guiding students to effectively use it, since in the near future internet technology will be used in education more than it is used now.
- For the experienced teachers, the Ministry of National Education is organizing in service training courses about English language teaching, new technologies in the field, computer use, etc. So they can participate in those training courses.
- For various course topics, internet can be used. So the teachers should present their lessons using computers and internet in order to motivate the students. They should benefit from the resources of internet not only for their students but also for their occupational development.
- They should find appropriate materials for their students by taking into account the age and level of them.
- They should adapt the materials which are found on the internet when necessary.
- They should try to use various materials such as, pictures, songs, puzzles, exercises, etc.
- They should find several authentic materials from internet in order to use in their lessons.
- As the most important problem, the number of computers should be increased. That means one computer should be provided for each student.

BIBLIOGRAPHY

- Akpınar, Y. 1999. **Bilgisayar Destekli Öğretim ve Uygulamalar**. Ankara: Anı Yayıncılık.
- Alden, S.B., & Curyea, A. (1994). **The information highway and our children**. Computer Learning. Palo Alto: Computer Learning Foundation.
- Alden, S.B., & Curyea, A. (1994). **The information highway and our children**. Computer Learning. Palo Alto: Computer Learning Foundation.
- Alkan, B. 1997. **The Investigation of the Comparison of Computer-assisted English Language Learning and Teacher-centered English Language Learning**. Yayınlanmamış Yüksek Lisans Tezi, Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü.
- Alkan, C. 1997. **Eğitim Teknolojisi**. Ankara: Anı Yayıncılık.
- Alkan, C., Deryakulu, D. ve Şimşek, N. 1995. **Eğitim Teknolojisine Giriş**. Ankara.
- Alkan, C., Teker, N. 1992. **Programlı Öğretim**. Ankara Üniversitesi Eğitim Bilimleri Fakültesi Yayınları, Ankara.
- Atkinson, R., Smith, E., Bem, D. 1993. **Introduction to Psychology**. Eleventh ed. Harcourt Brace College Pub. USA.
- Aydın, A. 2001. **Gelişim ve Öğrenme Psikolojisi**. 3. Baskı. Alfa Yayınları, 745, İstanbul.
- Balow, N. (1998). **Why bring the internet into the classroom?** Appalachia Regional Educational Laboratory – The Link, 17.
- Brown, Douglas H. 2000. **Principles of Language Learning and Teaching**. Fourth Edition. New York: Longman.
- Brown, Douglas H. 2001. **Teaching by Principles: An Interactive Approach to Language Pedagogy**. Second Edition. New York: Longman.

Caudell, L.S. (1994). **The Global Classroom**. Northwest Report. Washington, D.C: Office of Educational Research and Improvement.

Cebeci, E. D. 2000. **İşletmelerde teknolojik Stratejileri Kapsamında Web Tabanlı Eğitimler**. Yayınlanmamış Yüksek Lisans Tezi, Yıldız Teknik Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.

Celce-Murcia, Marianne. 1991. **Teaching English as a Second or Foreign Language**. Los Angeles: Heinle & Heinle Publishers.

Çele, Filiz. 1999. **A Survey of Present and Potential Uses of Internet Resources in Turkish Universities for ELT Purposes**. MA Thesis. Bilkent University, Institute of Economics and Social Sciences, Ankara.

Chan, B.K.K., Hodgkiss, I. J. & Chan, R.Y.P. (2002). A distributed learning model for freshwater ecology practical classes. **Journal of Computer Assisted Learning**, 18.

Chandra, Vinesh. 2004. **The Impact of Blended Web-based Learning Environment on the Perceptions, Attitudes, and Performance of Boys and Girls in Junior Science and Senior Physics**. Unpublished Doctorate Thesis. Australia. Curtin University of Technology.

Chou, C., Syed, Z and M Warschauer 1996. **Internet basics for language professionals**. Honolulu, Hawaii: Second Language Teaching & Curriculum Center.

Churach, Daniel N. 1999. **Internet Usage in Science Classrooms in Hawaii Catholic High Schools**. Unpublished Doctorate Thesis. Australia. Curtin University of Technology.

Collins, A. (1991). **The Role of Computer Technology in Restructuring Schools**. Phi Delta Kappan.

Collins, A., Brown, J.S. & Newman, S.E. (1989). **Cognitive apprenticeship: Teaching the craft of reading, writing and mathematics**. In L.B. Resnick, Knowing, learning and instruction: Essays in honor of Robert Glaser. Hillsdale: Erlbaum.

Corbel, C 2002. **Taking the web to task** . Sydney : National Centre for English Language Teaching and Research.

Cowder, N. A. 1964. **On the difference between linear and intrinsic programing**. In A. G. Grazia, & D. A. Sohn (Eds.), Programs, teachers, and machines. New York, NY: Bantam Books.

Crone, Eric E. 2001. **Teaching With the Internet**. Unpublished MA Thesis. Canada. University of Manitoba.

Cruickshank, D.R., Bainer, D. & Metcalf, K. 1995. **The Act of Teaching**. USA. McGraw Hill.

Crystal, D 2001. **Language and the Internet**. Cambridge: Cambridge University Press.

Demirel, Ö. 1994. **Genel Öğretim Yöntemleri**. 3. Baskı. USEM Yayınları, 11, Ankara.

Demirel, Ö., Seferoğlu, S.S. ve Yağcı, E. 2001. **Öğretim Teknolojileri ve Materyal Geliştirme**. Pegem A Yayıncılık, Ankara.

Demirel, Özcan. 1999. **İlköğretim Okullarında Yabancı Dil Öğretimi**. Ankara: Milli Eğitim Basımevi.

Dierker, R.A. (1995). **The future of electronic education**. In E.Boshmann (Ed.), The Electronic Classroom: A Handbook for Education in the Electronic Environment. Medford: Learned Information Inc.

Donat, S. 2000. **A Study on Computer Applications in Teaching Writing at the Department of Basic English at the Middle East Technical University**. Institute of Social Sciences, Ankara.

Dudeney, G 2000. **The Internet and the language classroom: a practical guide for teachers**. N Y: Cambridge University Press.

Eastment, D 1999. **The Internet and ELT: the impact of the Internet on English language teaching**. Oxford: Summertown Publishers.

Erden, M. & Akman, Y. 1995. **Eđitim Psikolojisi. Geliřim-Öđrenme-Öđretme**. II.Baskı. Arkadař Yayınevi, Ankara.

Ergin, A. 1991. **Yabancı Dil Öđretiminde Eđitim Araçlarından Yararlanma**. Ankara Üniversitesi Eđitim Bilimleri Fakültesi Dergisi, Cilt:23, Sayı:2, Ankara.

Feldman, S.R. 1993. **Understanding Psychology**. 3rd Edition, McGraw Hill, USA.

Felix, U 2001. **Beyond Babel: language learning online**. Melbourne: Language Australia.

Finocchiaro, Mary. 1964. **English as a Second Language: From :Theory to Practice**. New York: Simon and Schuster.

Flanders, B. (1994). A delicate balance. **School Library Journal**, 40.

Fowler, L.S. (1995). **Working together with technology**. The Electronic Classroom: A Handbook for Education in the Electronic Environment. Medford: Learned Information, Inc.

Freeman-Larsen, Diane. 2000. **Teaching Techniques and Principles in Language Teaching**. Oxford: Oxford University Press.

Gardner, H. (2001). **Can technology exploit our many ways of knowing? The Digital Classroom**. In D. T. Gordon, (Ed.), Cambridge, MA: Harvard Education Letter.

Giagnocavo, G., Mclain, T., DiStefano, V., & Sturm, C.N. (1995). **Educator's Internet Companion**. Lancaster, PA: Wentworth Worldwide Media, Inc.

Gürkaya, B. D. 1999. **Using the Internet and Electronic Mail in Writing Classes: A Study on the Reactions and Success of Preparatory Students at Isik University.** Unpublished Master Thesis. The Middle East Technical University, Institute of Social Sciences, Ankara.

Harmer, Jeremy. 1998. **How to Teach English.** Essex: Addison Wesley Longman Ltd.

Harris, J. 1994. Opportunities in work clothes: On-line problem-solving project structures. **Computing Teacher**, 21.

Heinich, R., Molenda, M., Russell, J.D. & Smaldino, S.E. 1996. **Instructional Media and Technologies for Learning.** Fifth Edition. Prentice Hall, New Jersey.

Hengirmen, Mehmet. 1993. **Yabancı Dil Öğretim Yöntemleri ve Tömer Yöntemi. (Foreign Language Teaching Methods and Tömer Method).** Ankara: Engin Yayın Evi.

Howatt, A.P.R. 1984. **A History of English Language Teaching.** Oxford: Oxford University Press.

Irvin, M. 1997. **Web Works.** New York: W.W. Norton.

Jarvela, S. & Hakkinen, P. 2000. **Levels of Web-Based Discussion: Theory of Perspective –Taking as a Tool for Analyzing Interaction.** Fourth International Conference of the Learning Sciences. Mahwah, NJ: Erlbaum.

Jensen, E. 1998. **Teaching with the brain in mind.** Alexandria: Association for Supervision and Curriculum Development.

Kahn, B. H. 1997. **Web-based Instruction.** Englewood Cliffs, NJ: Educational Technology Publications.

Keser, H. 1988. **Bilgisayar Destekli Öğretim İçin Bir Model Önerisi.** Yayınlanmamış Doktora Tezi. Ankara Üniversitesi Sosyal Bilimler Enstitüsü. Ankara.

Kindall, J. 1994. **Your Internet Primer: What is the Internet?** Enhance.

Klotz, G. 2001. **Math: Calculating the Benefits of Cybersessions.** The Digital Classroom (edited by David T. Gordon). Cambridge, MA: Harvard Education Letter.

Kroll, E. 1992. **The Whole Internet User's Guide and Catalog.** Sebastopol, CA; O'Reilly & Associates.

Kurland, D.J., Evers, C. & Sato, K. 1997. **Introduction to the Internet for Starr's biology texts.** Belmont: Wadsworth.

Kurubacak, G. 1999. **On-line Öğrenme: Web-Destekli Öğretime İlişkin Öğrenci Tutumları.** University of Cincinnati, OH.

Larsen-Freeman, Diana. 1986. **Techniques and Principles in Language Teaching.** Hong Kong: Oxford University Press.

LeBlanc, P. 1997. Masters of the Internet. **New England's Journal of Higher Education & Economic Development.**

Leshin, C., Pollock, J., Reigeluth, C. 1992. **Instructional Design Strategies and Tactics.** New Jersey: Educational Technology Publications.

Low, C. 2003. Educational psychology and the nature of e-learning. **Training Journal** (Jan).

Lubka, W., & Holden, N. 2000. **The KISS Guide to the Internet.** New York: Dorling Kindersley.

Maddux, C. D., Johnson, D. L., and Willis, J. W. 1997. **Educational computing: Learning with tomorrow's technologies.** (2nd ed.). Boston: Allyn and Bacon.

McGoldrick, Tierney Anne-Marie. 1997. **Enhancing the Process of Collaborative Learning through Educational Networking in the Canadian K- 12 Context.** Unpublished MA Thesis. Calgary, Canada. The University of Calgary.

McInerney, D.M. & McInerney, V. 2002. **Educational psychology: Constructing experience.** Frenchs Forest: Pearson Education Australia Pty. Limited.

Millen, James W. 2003. **Factors Affecting the Implementation And Use of Technology in Teaching Biology Courses in Florida's Community Colleges.** Unpublished Doctorate Thesis. Australia. Curtin University of Technology.

Mitra, A. & Steffensmeier , T. 2000. Changes in student attitudes and student computer use in a computer-enriched environment. **Journal of Research on Computing in Education**, 32(3).

Noam, E.M. 1998. Will books become the dumb medium? **Educom Review**, 33(2).

O'Neil, J. 1995. On technology schools: A conversation with Chris Dede. **Educational Leadership.**

Odabaşı, F. 1994. **Yabancı Dilde Dilbilgisi Öğrenmede Bilgisayar Destekli Öğrenme Yönteminin Öğrenci Başarısına Etkisi.** Yayınlanmamış Doktora Tezi. Anadolu Üniversitesi, Sosyal Bilimler Enstitüsü, Eskişehir.

Orhan, F., Akkoyunlu, B. 2004. **İlköğretim Öğrencilerinin İnternet Kullanımları Üzerine Bir Çalışma.** Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, Sayı 26, ss. 107-116.

Öztürk, M. C. 1995. **Bilgisayar Destekli Dil Öğretiminde Yazılım Değerlendirme.** Yayınlanmamış Yüksek Lisans Tezi. Anadolu Üniversitesi, Sosyal Bilimler Enstitüsü, Eskişehir.

Papert, Seymour. 1984. Trying to Predict the Future. **Popular Computing**, October.

Papert, Seymour. 1993. **The children's machine: Rethinking schools in the age of the computer.** New York: Basic Books.

Proctor, L.F. & Allen, A.J. 1994. **K-12 education and the Internet.** Saskatchewan: University of Saskatchewan. (ERIC Document Reproduction Service No. ED 373798).

Ratan, S. 1995. A new divide between haves and have-nots? **Time Magazine, special issue: Welcome to cyberspace**, 25.

Richards, Jack and Rodgers, Theodore. 2001. **Approaches and Methods in Language Teaching.** Cambridge: Cambridge University Press.

Riecken, D. 2000. Personalized Views of Personalization. **Communications of the ACM**, 43(8).

Roblyer, E., Havriluk, M.D., Edwards, J. & Havriluk, M. 1997. **Integrating educational technology into teaching.** Upper Saddle River, NJ.: Merrill.

Roblyer, M.D. 1999. Is choice important in distance learning? A study of student motives for taking internet-based courses at the high school and community college levels. **Journal of Research on Computing in Education**, 32(1).

Rosenshine, B. 1986. Synthesis of research on explicit teaching. **Educational Leadership**, (4).

Rowe, R.R. 2001. **The new knowledge world: The impact of the digital revolution.** Paper presented at the Australasian Information Online Conference and Exhibition, Sydney.

Saddik, A.M.E. 2001. **Interactive multimedia learning.** Berlin: Springer – Verlag .

Salomon, G. 1998. Novel constructivist learning environments and novel technologies: Some issues to be concerned with. **Research Dialogue in Learning and Instruction**, 1.

Salomon, G., Perkins, D.N. & Globerson, T. 1991. Partners in cognition: Extending human intelligence with intelligent technologies. **Educational Researcher**, 20.

Salvador, R. 1994a. Cable companies test Internet, school/home connections. **Electronic Learning**.

Salvador, R. 1994b. TCI, Bell Atlantic to connect schools to the Internet. **Electronic Learning**.

Sapp, D. 1996. Too Much Technology?. **MEA Voice**, 74.

Sarason, S.B. 1993. **The predictable failure of educational reform: Can we change course before it's too late?** San Francisco: Jossey-Bass.

Seitz, K. & Leake, D. 1999. Utilizing the Web in the Classroom. **The American Biology Teacher**.

Şentürk, H. 1997. **The Effects of Supplementary Computer Assisted Listening Instruction on Listening Comprehension Ability**. Yayınlanmamış Yüksek Lisans Tezi, Anadolu Üniversitesi Sosyal Bilimler Enstitüsü, Eskişehir.

Siegel, J. & Shaughnessy, M.F. 1994. Educating for understanding: An interview with Howard Gardner. **Phi Delta Kappan**, 75.

Silva, M. & Breuleux, A. 1994. The use of participatory design in the implementation of internet-based collaborative learning activities in K-12 classrooms. **Interpersonal Computing and Technology Journal**, 2.

Sperling, D 1997. **The Internet guide: for English Language Teachers**. Upper Saddle River, N.J.: Prentice-Hall.

Sperling, D 1998. **Dave Sperling's Internet guide**. Upper Saddle River, NJ: Prentice Hall Regents.

Teeler, D. 2000. **How to use the Internet in ELT** . Harlow: Longman.

Tomlinson, C.A. 1993. **The differentiated classroom: responding to the needs of all learners**. Alexandria: Association for Supervision and Curriculum Development.

Tor,H., Erden,O. 2004. **İlköğretim Öğrencilerinin Bilgi Teknolojilerinden Yararlanma Düzeyleri Üzerine Bir Araştırma**. TOJET January 2004 ISSN: 1303-6521 volume 3 Issue 1 Article 16.

Tuzcuoğlu, Ü. 2000. **Teachers' Attitudes Towards Using Computer Assisted Language Learning (CALL) in the Foreign Languages Department at Osmangazi University**. Unpublished Master Thesis. Bilkent University, The Institute of Economics and Social Sciences , Ankara.

Ülgen, G. 1997. **Eğitim Psikolojisi**. Alkım Yayınevi, İstanbul.

Vural, H. F. 1999. **İnternet Öğretiminde Bireysel Çalışma ve Grupla Öğrenme Yöntemlerinin Etkililiğinin Değerlendirilmesi**. Yayınlanmamış Yüksek Lisans Tezi, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.

Warschauer, M (ed.) 1995. **Virtual connections: online activities & projects for networking language learners**. Honolulu, Hawaii: Second Language Teaching & Curriculum Center, University of Hawaii at Manoa.

Warschauer, M 1995. **E-mail for English teaching: bringing the Internet and computer learning networks into the language classroom**. Alexandria, Virginia: TESOL

Warschauer, M 1999. **Electronic literacies: language, culture, and power in online education**. Mahwah, NJ: L Erlbaum Associates

Warschauer, M, Shetzer, H and Meloni, C 2000. **Internet for English teaching** Alexandria, VA: TESOL Publications

Warschauer, M. 1997. The Internet for English Teaching: guidelines for teachers. **TESL Reporter**, 30/1: 27-33.

Warschauer, M. 1996. **Computer-assisted language learning: an introduction**. In S. Fotos (Ed.), (pp.3-20). Tokyo: Logos International.

Wartman, C., Loftus, E.F., Marshall, M. 1998. **Psychology**. 3rd Edition. Barzoi Book, USA.
Windeatt, S Hardisty, D and Eastment, D 2000. **The Internet** . Oxford: Oxford University Press

Yaşar, Ş. 1990. **Yabancı Dil Öğretiminde Programlı Öğretim Uygulaması**. Eskişehir: Anadolu Üniversitesi Yayınları, No: 378.

Yavuz, F. 1995. **İnternetin İngiliz Dili Eğitimi Bölümündeki Çevrimiçi Lisansüstü Programlarının Gelişimine Olan Katkısı**. Yayınlanmamış Yüksek Lisans Tezi, Atatürk Üniversitesi Sosyal Bilimler Enstitüsü, Erzurum.

Internet Resources

Allen, I.E. & Seaman, J. 2003. **Sizing the opportunity: The quality and extent of online education in the United States**. http://www.sloan-c.org/resources/sizing_opportunity.pdf, 19.05.2008.

Arsham, H. 2002. **Interactive education: Impact of the internet on learning & teaching**. http://webwarper.net/ww/~GZ/ubmail.ubalt.edu/~harsham/interactive.htm?* , 19.05.2008.

Campos, M., Laferriere, T. & Harasim, L. 2001. **The post-secondary networked classroom: Renewal of teaching practices and social interaction**. Journal of Asynchronous Learning Networks, 5. http://www.sloan-c.org/publications/jaln/v5n2/pdf/v5n2_campos.pdf, 19.05.2008.

Conway, J. 1997. **Educational technology's effect on models of instruction**. <http://udel.edu/~jconway/EDST666.htm>, 19.05.2008.

Dowling, L.J. & Harland, D.J. 2001. **Critical factors in the effective use of technology.** <http://www.dowlingcentral.com/gradschool/Edu6420/project1.html> , 17.05.2008.

Dutton, J., Dutton, M. & Perry, P. 2002. **How do online students differ from lecture students?** Journal of Asynchronous Learning Networks, 6. http://www.sloan-c.org/publications/jaln/v6n1/v6n1_dutton.asp, 19.05.2008.

Eklund, J., Kay, M. & Lynch, H.M. 2003. **E-learning: Emerging issues and key trends.** www.flexiblelearning.net.au, 19.05.2008.

Frizler, K. 1995. **The Internet as an Educational Tool in ESOL Writing Instruction.** Master Thesis. San Francisco State University. <http://thecity.sfsu.edu/~funweb/thesis.htm>, 19.05.2008.

Gomory, R.E. 2001. Sheffield Lecture – Yale University, January 11, 2000, **Internet learning: Is it real and what does it mean for universities?** Journal of Asynchronous Learning Networks, 5. http://www.sloan-c.org/publications/jaln/v5n1/v5n1_gomory.asp, 19.05.2008.

Holland, J. 2002. The University of Wisconsin-Stout asynchronous learning network case study options: **Using technology to remove learning barriers.** Journal of Asynchronous Learning Networks, 4. http://www.sloan-c.org/publications/jaln/v4n2/v4n2_holland.asp, 19.05.2008.

http://www.meb.gov.tr/ADSL/adsl_index.html , 17.04.2008.

<http://yayim.meb.gov.tr/dergiler/167/orta3-oztok.htm> , 14.02.2008.

Jones, B.W. 1999. **A differentiating definition of instructional technology and educational technology.** <http://www.geocities.com/CapeCanaveral/Campus/7941/trmpprh.html> , 17.05.2008.

Mayadas, F. 2001. **Testimony to the Kerrey Commission on web-based education.** Journal of Asynchronous Learning Networks. http://www.sloan-c.org/publications/jaln/v5n1_mayadas.pdf, 19.05.2008.

Oppenheimer, T. 1997. **The computer delusion.** The Atlantic Monthly, 280(1). <http://www.theatlantic.com/issues/97jul/computer.htm>, 17.05.2008.

Parker, D. & Gemino, A. 2001. **Inside online learning: Comparing conceptual and technique learning performance in place-based and ALN formats.** Journal of Asynchronous Learning Networks, 5. http://www.sloan-c.org/publications/jaln/v5n2/pdf/v5n2_parkergemino.pdf, 19.05.2008.

Schrum, L. & Hong, S. 2002. **Dimensions and strategies for online success: Voices from experienced educators.** Journal of Asynchronous Learning Networks, 6. http://www.sloan-c.org/publications/jaln/v6n1/pdf/v6n1_schrum.pdf, 19.05.2008.

Spiceland, J.D. & Hawkins, C.P. 2002. **The impact on learning of an asynchronous active learning course format.** Journal of Asynchronous Learning Networks, 6. http://www.sloan-c.org/publications/jaln/v6n1/pdf/v6n1_spiceland.pdf, 19.05.2008.

TOJET – The Turkish Online Journal of Edu. Tech., www.tojet.net , 14.02.2008.

Wang, F.K. & Bonk, C.J. 2001. **A design framework for electronic cognitive apprenticeship.** Journal of Asynchronous Learning Networks,5. http://www.sloan-c.org/publications/jaln/v5n2/pdf/v5n2_wang.pdf, 19.05.2008.

Weaver, B. 2000. **Murrieta reviews computers in classrooms.** www.nctimes.net/news/100600/ddd.html , 18.05.2008.

Wegner, S.B., Holloway, K.C. & Garton, E.M. 1999. **The effects of internet-based instruction on student learning.** Journal of Asynchronous Learning Networks, 3. http://www.sloan-c.org/publications/jaln/v3n2/pdf/v3n2_wegner.pdf, 19.05.2008.

www.bilgisayarliegitimedestek.org , 17.04.2008.

APPENDICES

Appendix 1

T.C.
AFYONKARAHİSAR VALİLİĞİ
Milli Eğitim Müdürlüğü

Sayı : B.08.4.MEM.4.03.00.06-040 /
Konu : Araştırma İzinleri

08224 *24.03.2008

SELÇUK ÜNİVERSİTESİ SOSYAL BİLİMLER ENSTİTÜSÜ'NE

İlgi : 06/03/2008 tarih ve B.30.2.SEL.0.E1.00.00/360-1767 sayılı araştırma izni konulu yazınız

Müdürlüğümüze bağlı kurum ve kuruluşlarda yapılması planlanan araştırmalar için, Müdürlüğümüz bünyesinde oluşturulan "Araştırma Değerlendirme Komisyonu" toplanarak "Milli Eğitim Bakanlığı Eğitimi Araştırma ve Geliştirme Dairesi Başkanlığı" tarafından 28.02.2007 tarih ve B.08.4.EGD.0.33.03.311-311/1084 sayılı bakanlık onayı ile yayınlanan "Milli Eğitim Bakanlığına Bağlı Okul ve Kurumlarda Yapılacak Araştırma ve Araştırma Desteğine Yönelik İzin ve Uygulama Yönergesi" doğrultusunda ilgili izin talebini incelemiş olup "Valilik Oluru", "Araştırma Değerlendirme Formu" ve "Onaylanmış Veri Toplama Aracı" ekte sunulmuştur.

Bilgilerinizi ve gereğini arz/rica ederim.



Hidayet YILDIRIM
İl Milli Eğitim Müdürü

EKLER :

1. Valilik Oluru (1 Sayfa)
2. Araştırma Değerlendirme Formu (1 Sayfa)
3. Onaylanmış Veri Toplama Aracı (5 Sayfa)

T.C.
AFYONKARAHİSAR VALİLİĞİ
Milli Eğitim Müdürlüğü

Sayı :B.08.4.MEM.4.03.00.06-040 /
Konu :Araştırma İzinleri

08208 *24.03.2008

VALİLİK MAKAMINA


İlgi: 06/03/2008 tarih ve B.30.2.SEL.0.E1.00.00/360-1767 sayılı araştırma izni konulu yazınız.

Selçuk Üniversitesi Sosyal Bilimler Enstitüsü'nde Tezli Yüksek Lisans öğrencisi olan Ercan AKAR'IN Merkez İlçeye bağlı 14 ilköğretim okulunda 14/04/2008 - 11/05/2008 tarihleri arasında İngilizce Öğretmenlerine yönelik "İngiliz Dili Eğitiminde İnternet'in Bir Araç Olarak Kullanımı (Using the Internet as an English Language Teaching Tool)" konulu araştırma yapması Müdürlüğümüz Araştırma ve Değerlendirme Komisyonu tarafından uygun görülmektedir.

Makamınızca da uygun görüldüğü takdirde tensiplerinize arz ederim.


Hidayet YILDIRIM
İl Milli Eğitim Müdürü

OLUR
24/03/2008


Ömer ADAR
Vali a.
Vali Yardımcısı

EKLER:

1-Araştırma Değerlendirme Formu (1 Sayfa)

T.C.
MİLLÎ EĞİTİM BAKANLIĞI
Eğitimi Araştırma ve Geliştirme Dairesi Başkanlığı
ARAŞTIRMA DEĞERLENDİRME FORMU

ARAŞTIRMA SAHİBİNİN	
Adı Soyadı	Ercan AKAR
Kurumu / Üniversitesi	Selçuk Üniversitesi Sosyal Bilimler Enstitüsü
Araştırma yapılacak iller	Afyonkarahisar
Araştırma yapılacak eğitim kurumu ve kademesi	<u>Afyonkarahisar Merkez İlçeye Bağlı 14 İlköğretim Okulu</u> Kadayifçioğlu İÖO, Kasımpaşa İÖO, Fatih İÖO, Atatürk İÖO, Gedik Ahmetpaşa İÖO, Hacı Hayriye Özsoy İÖO, Hoca Ahmet Yesevi İÖO, Hüseyin Sümer İÖO, Kadınana İÖO, Oruçoğlu İÖO, Şemsettin Karahisari İÖO, Kocatepe İÖO, Özerler İÖO, Salar Atatürk İÖO, Salar İÖO.
Araştırmanın konusu	“İngiliz Dili Eğitiminde İnternet’in Bir Araç Olarak Kullanımı (Using the Internet as an English Language Teaching Tool)”
Üniversite / Kurum onayı	Var
Araştırma/proje/ödev/tez önerisi	Var
Veri toplama araçları	Anket
Görüş istenilecek Birim/Birimler	
KOMİSYON GÖRÜŞÜ	
Afyonkarahisar Merkez İlçeye bağlı ilköğretim Okullarında “İngiliz Dili Eğitiminde İnternet’in Bir Araç Olarak Kullanımı (Using the Internet as an English Language Teaching Tool)” konulu araştırma yapılması, öğretmenlerin dil öğretiminde internetten ne şekilde yararlanabileceklerinin test edilmesi açısından uygun görülmüştür.	
Komisyon kararı	Oybirliği
Muhalef üyenin Adı ve Soyadı:	Gereğesi;

KOMİSYON

24/03/2008

Komisyon Başkanı

A.Fevzi ÖZDEMİR

Üye

Mustafa GÜNAY

Üye
Musa DİMCİGEZÜye
Ercan SAYIT

Appendix 2

Teacher Questionnaire

Dear Colleague,

I am a student in MA TEFL program at Selcuk University. In order to collect data for my research study I have prepared this questionnaire. The purpose of this questionnaire is to determine the present usage of the computers and the internet in English language teaching in the primary schools of Afyonkarahisar. The questions focus on the use of internet resources such as e-mail, chat groups, and World Wide Web in English language teaching. The names of the participants will be kept anonymous. Your participation will provide valuable data for the study. Thanks for your cooperation.

Ercan AKAR
MA TEFL Program
Selcuk University

I. PERSONAL BACKGROUND

1. Please check: Female: Male:
2. What school do you teach in?
3. How long have you taught English?
4. How long have you been teaching in your current school?

II. COMPUTER BACKGROUND

5. Does your school provide computers for teachers? a. Yes b. No
6. Do you have a computer at home? a. Yes b. No
7. Do you use the Internet? a. Yes b. No
8. Why do you use the Internet?
a. Personal interests b. Occupational interests c. Both

If you never use computers, please skip to question 11.

9. Check on the list below to indicate your customary use of the internet.

	Daily	Once or twice a week	Several times a month	A few times a year	Never
a. Word processing					
b. E-mail					
c. World Wide Web					
d. Discussion lists (e.g. TESL-L, FLTEACH-L)					
e. Internet Chat Groups (e.g. IRC, MOOze)					
f. Electronic Journals (TESL-EJ, TESLCA-L)					
g. Other (please specify)					

10. Do you use any of the above for English language teaching? If so, WHICH ones?
In WHAT ways?

III. STUDENT COMPUTER USE

11. Do your students use the Internet at school?

- a. Yes b. No c. I do not know

(If NO, please SKIP TO the question 15).

12. Why do your students use the Internet?

- a. Personal interest b. Doing homework c. Both d. I do not know

13. Do your students use Internet resources for English language courses in your school?

- a. Yes b. No

14. If you answered YES to the above question, please explain WHICH Internet resources are used and in WHAT ways?

IV. BELIEFS AND ATTITUDES

Below are listed five kinds of Internet resources that can be used for English language learning and teaching.

- a. Electronic Mail: It is the way of sending messages from one computer to one or more computers around the world and of communicating with individuals. E-mail is used by teachers for teacher collaboration, exchanging ideas and all over the world. Students can communicate and share experiences, opinions and feelings with other students from different countries.
- b. World Wide Web: It is a single integrated system that pools resources from all over the world. It has a full graphic interface not only for reading text, but also for displaying photos, listening to sound and viewing full-motion on screen. It is based on a powerful concept called hypertext, which uses pointers to let you search for information. It is essential for the delivery of authentic materials in the form of texts, images, sound recording, video clips, and even virtual reality words. The Web supports collaborative and cooperative activities such as collecting information for task-based projects and publishing to a large audience on the Web.
- c. Electronic Discussion Lists: Electronic discussion groups or lists (LISTSERVS) use e-mail to provide a forum where people of similar interests can participate in a professional dialogue and share resources. Hundreds of lists that may be of interest to language teachers are available on the Internet such as TESL-L and FLTEACH-L. Once you start subscribing to any listservs, all the posted messages are sent into your e-mailbox daily.
- d. Electronic Journals: There are several electronic journals which target language professionals. Generally, these journals are free, are published quarterly and do not exist in paper form such as TESL-EJ.
- e. Internet Chat Groups: Internet services are formatted to allow people from all over the world to chat together at the same time. Students can make real-time electronic discussion on the Internet. For example; MOO and IRC are the famous chat servers where many people meet for real time, live communication among like-minded people.

15. Of the above Internet resources WHICH ONES do you think might be useful for English language learning? Please circle the letters below.

- a. Electronic Mail b. World Wide Web c. Electronic Discussion Lists
d. Electronic Journals e. Internet Chat Groups

16. Which ones of the following would you be most interested in using in your English language courses? Please circle the letters below.

- a. Electronic Mail b. World Wide Web c. Electronic Discussion Lists
d. Electronic Journals e. Internet Chat Groups f. None

17. Why did you choose the above Internet resources for your English language courses?

V. CONCERNS

18. Please check the items that seem the most problematic to you in implementing the Internet in ELT classes in primary schools.

- a. training students to use computers and Internet
 b. training teachers to guide students in using computers and Internet
 c. getting technical help for fixing computers
 d. providing adequate number of computers
 e. lack of desire on the part of headmasters
 f. lack of desire on the part of teachers
 g. lack of knowledge on the part of headmasters
 h. lack of knowledge on the part of teachers
 i. other (please specify)

19. Please look at the answers you checked in the above question 18 and rank order 5 most problematic issues below in your school. Please use (1) for the most problematic and (5) for the least problematic.

- a. training students to use computers and Internet
- b. training teachers to guide students in using computers and Internet
- c. getting technical help for fixing computers
- d. providing adequate number of computers
- e. lack of desire on the part of headmasters
- f. lack of desire on the part of teachers
- g. lack of knowledge on the part of headmasters
- h. lack of knowledge on the part of teachers
- i. other (please specify)

20. Do you think that the Internet resources such as WWW, e-mail and listservs can add enough to classroom for English language learning?

- a. Yes definitely b. To some extent c. No, probably not

21. Please add any comment you may have about the use of the Internet technology for English language learning and teaching in primary schools.